System Requirements Specification

for

Quezon City eCourt

Quezon City Hall of Justice

Company Proprietary

Table of Contents

1 OVERVIEW

1.1 Purpose of Document

The content of this document is the result of constant collaboration of Ideyatech, ABA-ROLI and Quezon City Court Personnel through extensive review of the QCeC prototype.

The purpose of this document is divided into three (3):

a. To set the grounds for a common understanding between the OCC, BCC, Branch Staff and Judges of Quezon City Hall of Justice (QC HOJ), as represented by the Technical Working Group; the American Bar Association ROLI (ABA-ROLI); and the Ideyatech project team regarding the details of the projectrequirements;

b. To serve as a baseline of requirements in order for ABA-ROLI and Technical Working Group to verify completeness and correctness of system delivered by Ideyatech; and

c. To serve as the basis for all specifications and assist the Ideyatech project team members in the development of the Quezon City eCourt.

Moreover, this document intends to convey to the interested parties the purpose, scope and requirements of the QCeC.

1.2 Document Conventions

This document emphasizes the distinction between the use of “shall”, “must”, “will”, “should”, “may” and “can”, based on Section 5 of the 2007 IEEE Standards Style Manual (http://standards.ieee.org/guides/style/section5.html)

a. The word “must” is used only in describing unavoidable situations.

b. The word “will” is used only in statements of fact.

c. The word “can” indicates possibility and capability, whether material, physical or causal.

d. The word “shall” indicates mandatory requirements strictly to be followed in order to conform to the standard and from which no deviation is permitted.

e. The word “should” indicates that among several possibilities, one is recommended as the best suitable, but not necessarily required.

f. The word “may” indicates a course of action permissible within the limits of the standard.

1.3 Intended Audience and Reading Suggestions

This document should be reviewed along with the QCeC Screen Workflow Document in order to fully understand how the functionalities will be used.

This document contains six(6) sections:

a. An overview of the requirements, which includes a summary of the scope, assumptions and limitations of the project;

b. A description of the system, which includes an explanation of the system's purpose, features and benefits, characteristics, and technical and operational background; and,

c. A list of requirements, which contains information regarding each system requirement, such as the modules, users and activities involved with each requirement.

d. A list of definition of terms used in the document;

e. A list of issues and questions for consideration; and,

f. A list of the appendices.

This document is intended for the following people:

a. Technical Working Group– The TWG and other court personnel involved in the project should read this document thoroughly to verify that the requirements are correct and applicable to the various groups.

b. ABA-ROLI Team – ABA-ROLI shall read this document to ensure they understand the requirements for implementation and for acceptance of software.

c. The Ideyatech Project Team – The Ideyatech project team shall use this document as basis for the development of the QCeC.

2 REQUIREMENTS OVERVIEW

2.1 Objective

The objective of the project is to modernize and improve the current administrative operations of the Quezon City Hall of Justice(QC HOJ)—focusing on the QC Regional Trial Court (QC RTC) and the QC Metropolitan Trial Court (QC MeTC)—via a case management system called the Quezon City eCourt (QCeC). This case management system provides the means to manage court cases, court documents, evidences, case incidents and activities. Furthermore, this system provides tracking and management of the court calendar and automatic generation of reports.

2.2 Scope

The eCourt application covers the following major functionalities needed to support the administrative functions of the system. Details of the functionalities are described in the subsequent chapters.

a. Office of the Clerk of Court

- Assessment of Filing Fees
- Verification of Case Documents and Fees
- Payment of Filing Fees
- Docketing of Case
- Electronic Raffling of Case

b. Court Branch

- Receiving of Subsequent Pleadings
- Management of Case Documents
- Management of Evidence
- Management of Case Activities and Schedule
- Creation of Court Resolutions, Orders from pre-defined templates
- Management of Mails (e.g. Summons, Orders, etc.)
- Management of Users and System Roles
- Tracking of Court Calendar
- Generation of Reports

c. System Administrator

- Management of Branches, Users, System Roles and Access Rights
- Management of Drop-down Values (e.g. Case Incidents, Nature of Case, etc.)

d. Court Management Office

- Generation of Reports

e. Public/PAO/DOJ and other QC HOJ Users

- Search of Case and Case Status
- Viewing of Court Calendar

2.3 Limitations

The system shall be limited and shall not support the following:

a. Handling of Executive Matters is not covered since they do not involve any activities on the case.

b. Recording of Small Claims Cases is not integrated into the eCourt System.

c. The eCourt is designed based on EISP requirements. However, it does not implement ALL requirements of EISP requirements.

2.4 Assumptions

The following are the assumptions in creating and maintaining this document:

a. This document will be reviewed thoroughly and approved by the TWG as official requirements for QC eCourt.

3 SYSTEM DESCRIPTION

3.1 Context Diagram

The figure below represents the context diagram of the system. The users of the system are broken down into five (5) offices namely: Office of Clerk of Court (OCC), Branch/Court (BCC), System Administrator, Court Management Office and the Public. OCC and BCC have various roles within their group that perform different functions. A more detailed list of functions of each role is described in Section 3.2.

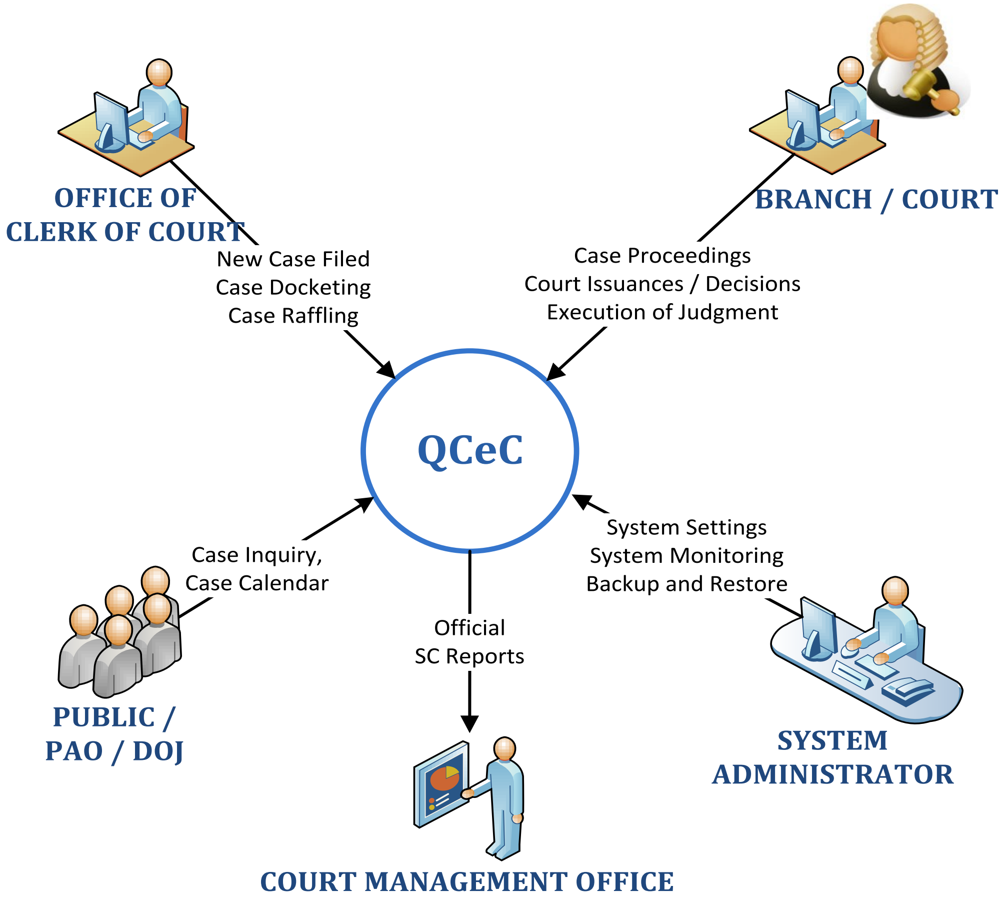


Figure 3-1: Context Diagram

3.2 User Classes and Characteristics

The table below lists functions that are available for users as grouped by their respective offices above.

Office of the Clerk of Court

USER	OVERVIEW OF RESPONSIBILITIES TO THE SYSTEM
ASSESSOR	The Assessor computes the filing fee and prints the payment form.
VERIFIER	The Verifier validates and checks the correctness and completeness of the initiatory documents prior to payment and filing of the case.

USER	OVERVIEW OF RESPONSIBILITIES TO THE SYSTEM
CASHIER	The Cashier receives the payment from filing party along with payment form. The cashier enters the payment details (i.e. cash/check details) and prints the official receipt.
DOCKET CLERK (Civil Docket Clerk, Criminal Docket Clerk)	The Docket Clerk encodes basic information on the case profile, i.e. case details and party details. After docketing, the system automatically assigns the case number and performs electronic raffle of new cases. A barcode sticker will also be printed and attached to the case as reference.
OCC (Office of Clerk of Court)	The OCC monitors the operation of the entire office by tracking the activities (i.e. assessments, payments, docketing, etc.) and monitoring the results of electronic raffle. The OCC also administers the users who can perform OCC functions.

Court Branch

USER	OVERVIEW OF RESPONSIBILITIES TO THE SYSTEM
BRANCH CLERK (BCC, Civil Clerk, Criminal Clerk)	The Branch Clerk performs the following tasks: • Accepts the newly raffled case • Encodes and updates the case profile (i.e. counsel details, evidences) • Records case incidents and actions • Monitors case activities • Uploads court resolutions and decisions • Monitors execution of judgment • Administers who can access the system within their branches.
JUDGE	The Judge performs the following tasks: • Acts on the cases via case actions • Monitors the case activities and schedule • Uploads court resolutions and decisions (Optional)
STENOGRAPHER	The Stenographer performs the following tasks: • Uploads court orders and documents (via document template) • Uploads minutes and stenographic notes • Prepares mail labels and RRC for distribution
INTERPRETER	The Interpreter performs the following tasks: • Manages the court calendar • Determining upcoming hearing dates for a case • Generating the daily court calendar.
EXECUTIVE JUDGE and VICE EXECUTIVE JUDGE	The Executive Judge and Vice Executive Judge performs the following tasks: • Search and View of all cases in QC HOJ • Generation of report for all cases in QC HOJ

USER	OVERVIEW OF RESPONSIBILITIES TO THE SYSTEM
	Note: EJ and Vice-EJ performs similar functions of a Judge in the court he/she is assigned.

Court Management Office

USER	OVERVIEW OF RESPONSIBILITIES TO THE SYSTEM
CMO (Court Management Office)	The CMO generates real-time official SC reports for all branches in QC HOJ based on the data available in the system.

System Administrator (MISO)

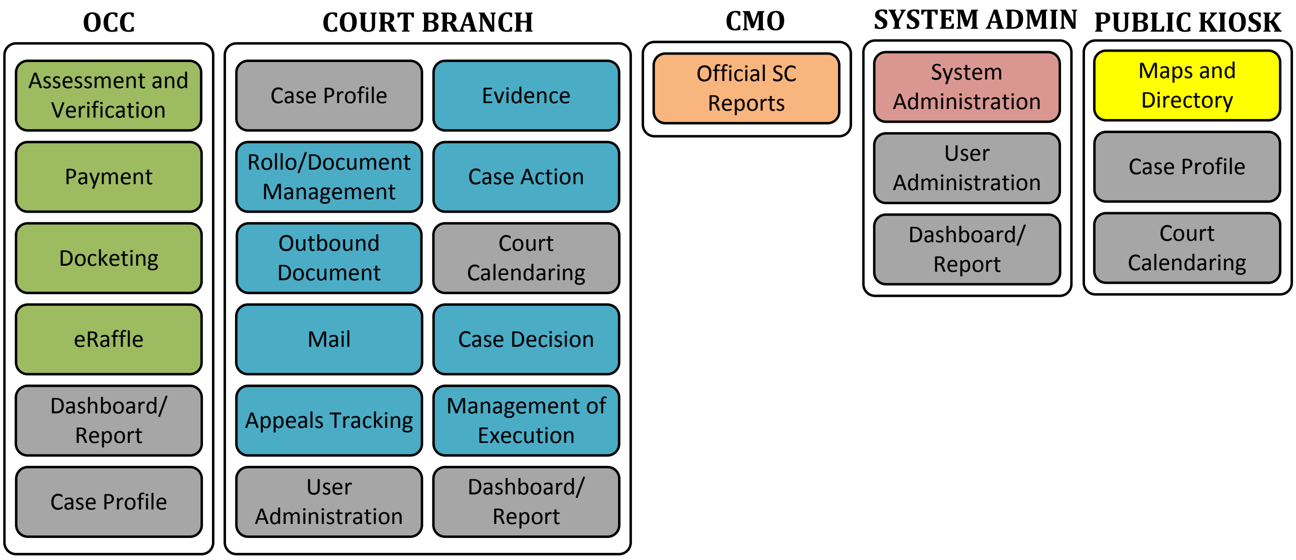
USER	OVERVIEW OF RESPONSIBILITIES TO THE SYSTEM
SYSTEM ADMINISTRATOR	The System Administrator performs the following tasks: • Manages Branches and Users • Manages Roles and Access Rights • Manages Dropdown Values (System Codes) • Manages Case Incidents and Actions • Manages Document Templates • Monitoring of Server and Network Performance • Backup and Restore of the System

Public

USER	OVERVIEW OF RESPONSIBILITIESTO THE SYSTEM
Public	The Public Users searches for their cases and accesses basic information about them (e.g. Case Title, Status). The Public also accesses the court calendar to check for hearing dates.
PAO (Public Attorney's Office), DOJ, PMC	The PAO, similar to Public Users, searches for their cases and access basic information about them (e.g. Case Title, Status). PAO also accesses the court calendar to check for hearing dates.

3.3 Modules Design

The diagram below depicts the system, its components and its modules:



The modules are grouped into five (5) components, depicted in different shades above.

a. The OCC Component, represented by the green shade, includes activities of the OCC and the users under its office.

b. The BCC Component, represented by the blue shade, includes activities of the BCC and the users under the branch.

c. The CMO Component, represented by the orange shade, includes activities of the Supreme Court – Court Management Office in generating reports.

d. The System Admin Component, represented by the red shade, includes activities of the System Administrator to manage the system.

e. The Public Kiosk Component, represented by the yellow shade, includes activities that the Public User can do to the system.

The Shared Component, represented by the gray shade, includes activities that are applied across the components. To depict it correctly, the corresponding modules are placed under its respective component. Each component and its modules are detailed out in Chapter 4 below.

3.4 Operating Environment

QCeC requires the following minimum specification for hardware, software and infrastructure in order to operate properly:

a. Server Specification

Application Rack Server

1. 2 x Intel® Xeon® Processor E5606 or higher
2. 12 GB PC3-10600R-9(RDIMM) or higher
3. Integrated Dual Port Gigabit Server Adapter

4. 2 x HP 1TB 7.2k HP MDL SATA (RAID 0 or 1)
5. Compatible with Ubuntu or Linux variant operating system.
6. Operating system should be hardened with necessary open ports.

Database Rack Server

1. 2 x Intel® Xeon® Processor E5606 or higher
2. 16 GB PC3-10600R-9(RDIMM) or higher
3. Integrated Dual Port Gigabit Server Adapter
4. 1 x HP P410/256 Smart Array Controller 5 x HP 500GB 7.2k (RAID 5)
5. Compatible with Ubuntu or Linux variant operating system.
6. Operating system should be hardened with necessary open ports.

Note: Separate server configuration shall be allocated for RTC and MeTC.

b. Workstation Specification (Minimum)

1. Intel Pentium 4 or higher
2. At least 1Gb RAM
3. Windows XP, Windows 7 or higher
4. Firefox 7.0 Browser or higher
5. Adobe PDF viewer
6. Workstations should have appropriate security controls (e.g. anti-virus, spam detector, etc.).

c. Network Configuration

7. Workstations should have stable and reliable network access to the eCourt server.
8. Workstations should be able to access http port of the eCourt server.

3.5 Software Components

QCeC is based on the following software components and shall require the following to be installed on the servers:

- Apache Tomcat 7.0 or higher
- Java Software Development Kit (SDK) v 6.0 or higher
- MySQL Community Edition 5.5 or higher
- Open Office Server – for processing of word document.

In addition, the following technology stack will be used in developing the QCeC application:

- HTML/JSP/CSS/Web 2.0
- Javascript/Ajax/JQuery

- Java
- Spring and Spring MVC
- Jasper Reports
- JPA/Hibernate
- Attaché and Open-Tides

The application framework of QCeC is built on top of Open-Tides, an open-source web application framework developed by Ideyatech. Furthermore, some modules will be derived from Attaché, a case management system developed by Ideyatech.

Ideyatech will give complete copies of the source code to Supreme Court for future updates and maintenance.

3.6 Issues/Questions

- Should we keep separate role for Interpreter and Stenographer? Or should we combine their access as one?
- How can we verify if CMO is able to properly access the reports in the system through the VPN?

4 MODULE REQUIREMENTS

This section details the description of each module involved under each component.

4.1 The OCC Component

The diagrams below depict the OCC workflow for new cases with filing fee (first image below), and for new cases without filing fee (second image below).

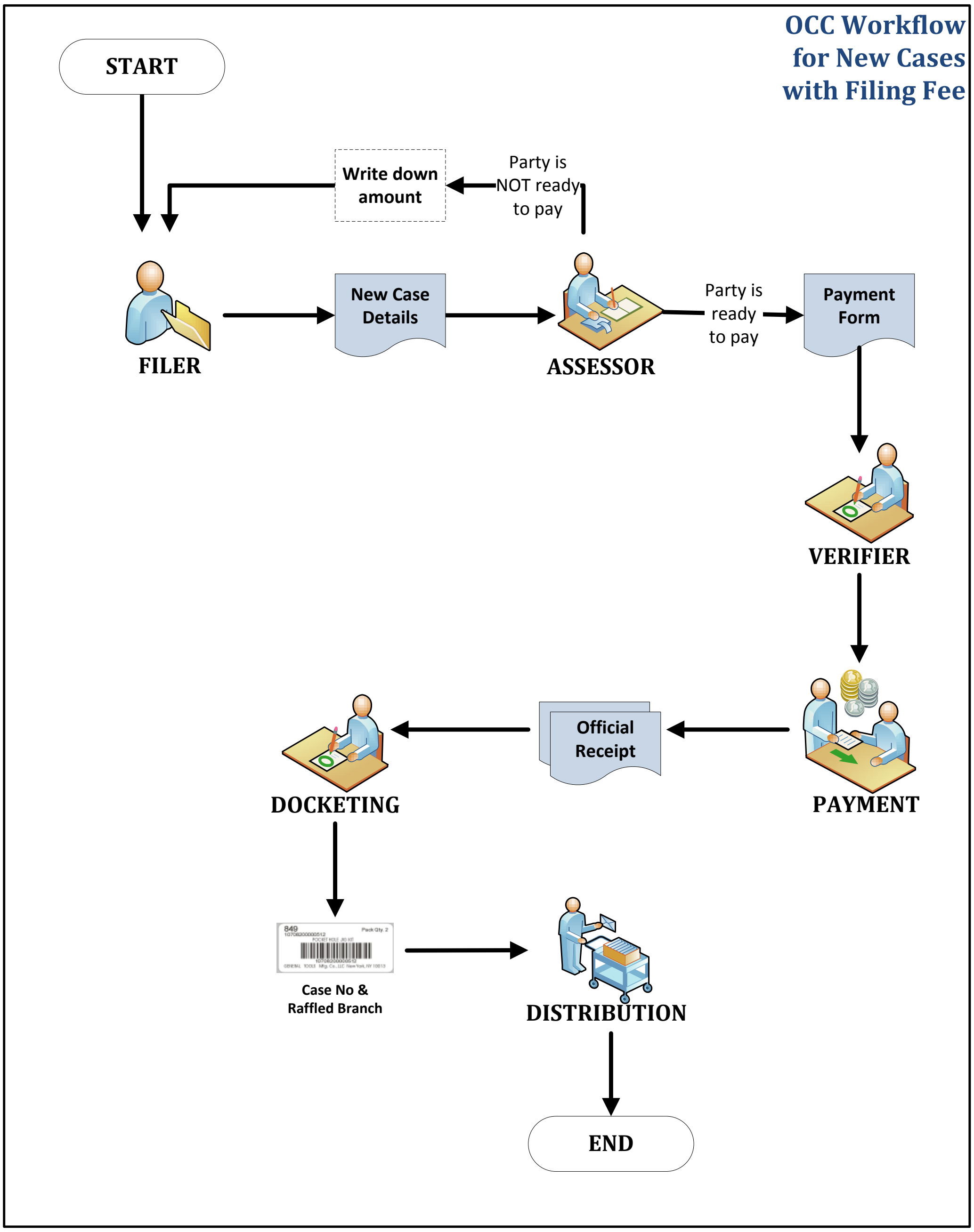


Figure 4-1: OCC Workflow for New Cases With Filing Fee

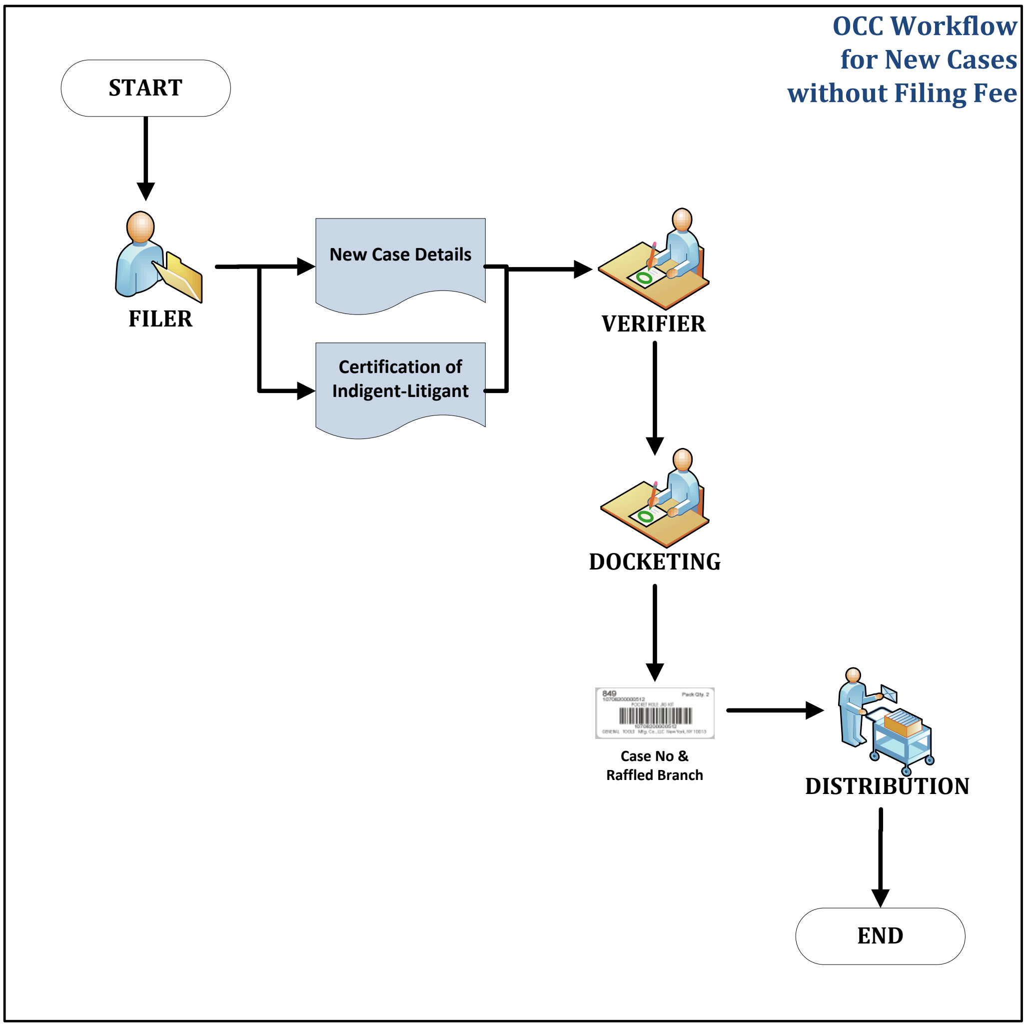


Figure 4-2: OCC Workflow for New Cases Without Filing Fee

General Description of OCC Modules

This section provides a table of the different modules involved in the OCC component with a listing of the different actions of the users involved. Specific requirements follow in the next section.

MODULE	GENERAL DESCRIPTION OF ACTIONS INVOLVED
Assessment and Verification	• Receives new case details for assessment • Completes the assessment of requirements to generate payment form • Verifies assessment and payment form
Payment	• Enters payment details on the payment form • Prints Official Receipts
Docketing	• Completes basic case information on the case profile, including case number, case party, related cases.
Appeals Tracking	• Add case origin as MeTC • Auto-complete list of MeTCs
eRaffle	• Automatically assigns a case to a branch via electronic raffle as soon as

	the case is docketed. • Provides a means to manually assign or re-raffle a case to a different branch in specific circumstances described later in this document. • Automatically generate and print a barcode sticker for the case rollo.
Dashboard/ Report	• Installs/Adds, Uninstalls/Deletes, views and move dashboard widgets. • View, Customize and Print standard reports.
Case Profile	• View Case Profile • Add, edit and delete Case Profile Information, Party Details, Counsel Details, Case References, Subsequent Documents, Payments and Notes
Search	• Provides the search mechanism for all objects in the system: assessments, payments and cases. • View, sort and filter search results.

Detailed Requirements of OCC Modules

The following sections detail out the specific requirement of the system per module.

4.1.1.1 OCC Assessment and Verification Module

Req #	Requirements Description
1.01	The system shall allow the ASSESSOR to create a new assessment so that new case being filed for payment is recorded.
1.02	The system shall assign a unique ID for each new assessment so that each assessment can be easily distinguished.
1.03	The system shall allow the ASSESSOR to edit an existing assessment so that corrections can be made.
1.04	The system shall allow the ASSESSOR to enter 'count' for criminal cases so that it can be used as basis of computation of filing fees.
1.05	The system shall multiply the filing fee based on the count that has been entered.
1.06	The system shall automatically compute fees identified by funds based on 'purpose' and 'nature of case', and 'amount involved' in some cases. Refer to Section 6.1 - Appendix A – List of Values for Payment Fees and Nature of Case
1.07	The system shall allow OCC STAFF to search for existing assessments so that previous assessments can be retrieved.
1.08	The system shall allow the ASSESSOR to change the sort order and navigate by page number in search assessment results so that long list of assessments can be easily retrieved.
1.09	The system shall allow the ASSESSOR to add a new fund entry in the assessment form so that additional funds can be recorded.
1.10	The system shall allow the ASSESSOR to edit or delete a fund entry in the assessment form so that corrections to funds (e.g. amount) can be recorded.
1.11	The system shall allow the ASSESSOR to enter Miscellaneous payments so that non-case related payments (e.g. notarial fee, marriage fee) can be recorded.

Req #	Requirements Description
1.12	The system shall allow ASSESSOR to generate payment form based on the assessment details inputted.
1.13	The system shall allow the ASSESSOR to print the payment form containing assessment details so that it can be issued to Filing Party prior to payment.
1.14	The system shall allow the VERIFIER to record exemption of filing fees so that exempted parties (e.g. indigent, etc.) can file their cases without payment.
1.15	The system shall automatically include Sheriff Trust Fund for all new cases filed so that STF is paid even on cases exempted from Filing Fees.
1.16	The system shall allow the VERIFIER to manually input funds so that other Funds can be recorded when Filing Party is exempt from payment of filing fees.
1.17	The system shall allow the VERIFIER to verify documents submitted for case filing so that annexes and appendices are checked prior to receipt of case records.

4.1.1.2 OCC Payment Module

Req #	Requirements Description
2.01	The system shall allow the CASHIER to specify payment details so that mode of payment (cash/check) and amount paid is recorded.
2.02	The system shall allow the CASHIER to enter check details (i.e. bank, check number) for each type of fund so that check details are recorded.
2.03	The system shall allow the CASHIER to view the payment details so that payment details can be reviewed and verified.
2.04	The system shall allow the CASHIER to edit payment details of a case, when needed.
2.05	The system shall allow the CASHIER to print and reprint an official receipt so that it can be issued to Filing Party.
2.06	The system shall allow the CASHIER to cancel or refund an official receipt so that corrections can be recorded.
2.07	The system shall require a reason for cancellation if official receipt will be cancelled or refunded so that reason is clearly identified.
2.08	The system shall allow the CASHIER to search for existing official receipts using official receipt number, date, assessment id and nature of case.
2.09	The system shall provide payment template that defines the computation rules of filing fees based on 'purpose', 'nature', and 'amount' so that filing fees can be automatically computed by the system.
2.10	The system shall allow the OCC to add a payment template based on 'purpose' and 'nature of case' and 'amount involved' so that new payment computation can be added.
2.11	The system shall validate the payment template to avoid duplicate entries. For example, 2 templates with same purpose and nature.

Req #	Requirements Description
2.12	The system shall allow the OCC to view the list of payment templates and their contents so that computation formula can be reviewed and verified.
2.13	The system shall allow the OCC to edit and delete the details of a payment template so that corrections or changes to computation can be recorded.
2.14	The system shall be able to split the official receipt specifically for Sheriff's Trust Fund (STF) so that it can be refunded in the future by the Filing Party.
2.15	The system shall be able to automatically increment official receipt number based on the last issued OR of the user so that generation of OR is faster.
2.16	The system shall be able to check for duplicate official receipt numbers so that numbering errors are avoided.
2.17	The system shall allow the CASHIER to change the sort order and navigate by page number in search payment results so that long list of payments can be easily retrieved.

4.1.1.3 OCC Docketing Module

Req #	Requirements Description
3.01	The system shall allow the DOCKET CLERK to docket a new case so that initial case details are recorded.
3.02	The system shall allow the automatic assignment of a case number based on official SC numbering system.
3.03	The system shall allow generation of multiple case numbers for cases with multiple counts.
3.04	The system shall automatically assign default court type based on nature of case filed.
3.05	The system shall allow DOCKET CLERK to add/edit/delete party details of the case so that party information is readily available.
3.06	The system shall allow DOCKET CLERK to add case reference in case of consolidated cases so that case can be raffled to appropriate branch.

4.1.1.4 eRaffle Module

Req #	Requirements Description
4.01	The system shall be able to electronically raffle a case to a branch after docketing so that filing party knows the branch handling their case immediately after raffle.
4.02	The system shall allow scheduling of electronic raffle so that raffling of cases with TRO can be performed after the party has been informed of the case filed.
4.03	The system shall automatically classify a branch as Regular or New based on total case workload of the branch so that it can be used for electronic raffle.
4.04	The system shall allow the OCC to manually classify a Branch as New, Regular or Vacant so that raffling of cases can be properly distributed.

Req #	Requirements Description
4.05	The system shall allow OCC to specify which branch is the Executive Judge so that it can be used for electronic raffle.
4.06	The system shall randomly select a branch based on the assignment ratio of 1:2:6; whereas Executive Judge is 1 case; Regular Branch is 2 cases; and New Branch is 6 cases so that case distribution follows prescribed rules.
4.07	The system shall not include branch that are vacant for raffle so that no additional cases are raffled to the branch.
4.08	The system shall restrict selection of branches to appropriate courts when case belongs to special court so that special cases are assigned to special courts (e.g. Commercial Court, Drugs Court, etc.).
4.09	The system shall automatically change the status of a case to 'raffled' after it has been raffled to a branch.
4.10	The system shall provide an animation to display the raffle process and its result so that random selection is projected to the user.
4.11	The system shall allow the user to manually assign a case to a branch so that cases for consolidation can be routed to appropriate branch.
4.12	The system shall require a reason if case is manually assigned so that reason is clearly recorded.
4.13	The system shall allow the OCC to re-raffle a raffled case so that inhibitions can be processed.
4.14	The system shall allow the user to print a barcode on a sticker to be attached to the initial document of newly raffled case.
4.15	The system shall allow the Judge and BCC to request for a case to be re-raffled so that inhibitions and other reasons for re-raffle can be recorded.

4.1.1.5 OCC Case Profile Module

Req #	Requirements Description
5.01	The system shall allow OCC STAFF the viewing of the Case Profile page that contains the different sections of case details so that all case related information can be easily viewed in one page.
5.02	The system shall allow the OCC STAFF to modify of Case Information so that updates and corrections can be recorded.
5.03	The system shall allow the OCC STAFF to view the Party Details section of the Case Profile page.
5.04	The system shall allow the OCC STAFF to add the list of Parties involved in a case so that additional parties or changes in party can be recorded.
5.05	The system shall allow the OCC STAFF to edit and delete Party Details of a caseso that corrections or changes to party details can be recorded.
5.06	The system shall be able to automatically display other existing cases involving the parties listed so that the OCC STAFF is informed of possible related cases of the party.
5.07	The system shall allow the OCC STAFF to add the party record history as a note so that it can be easily referenced in the future.
5.08	The system shall allow the OCC STAFF to view Case References Details section of the Case Profile page.
5.09	The system shall allow the OCC STAFF to associate one case with another case using the case reference so that consolidated and related cases are properly recorded.
5.10	The system shall allow the OCC STAFF to retrieve the change history of a case so that they can check who does what and when.
5.11	The system shall allow OCC STAFF to search for existing cases so that information (e.g. handling branch) about the case can be easily retrieved.
5.12	The system shall allow OCC STAFF to view the search case results so that cases matching the search criteria can be retrieved.
5.13	The system shall allow OCC STAFF to change the sort order and navigate by page number in search case results so that long list of cases can be easily retrieved.

4.1.1.1 OCC Appealed Cases Module

Req #	Requirements Description
6.01	The system shall make provisions to indicate a case is appealed from the MeTC to RTC.
6.02	The system shall allow the DOCKET CLERK to search for decided MeTC cases as autocomplete in the Case Origin upon filing of new case so that details from originating court is accessible to the appellate court.
6.03	The system shall add the MeTC case as case reference when case is appealed so that the lower court case can be easily referenced.

4.1.1.2 OCC Dashboard Module

Req #	Requirements Description
7.01	The system shall allow ALL USERS to view a list of recent activities they have done so that they can quickly recall the most recent actions they have performed on the system.
7.02	The system shall allow the ASSESSOR to view a bar graph of a summary of (new) assessments so that they have indicator of volume of assessments for the past 7 days.
7.03	The system shall allow the ASSESSOR and VERIFIER to view a list of assessments done for the day so that they can easily find assessment made for the day.
7.04	The system shall allow the ASSESSOR and VERIFIER to view a list of assessments verified for the day so that they can easily find assessments verified for the day.
7.05	The system shall allow the CASHIER to view a list of assessments paid for the day so that they can easily find new cases filed.
7.06	The system shall allow the DOCKET CLERK to view a list of cases for docketing so that they can easily find new cases for docketing.
7.07	The system shall allow the DOCKET CLERK and OCC to view a list of cases for raffle (postponed) so that cases with TRO awaiting notice to adverse parties can be tracked.
7.08	The system shall allow the DOCKET CLERK to view a list of cases raffled for distribution so that they can easily identify cases that have not been received by the branches.

4.1.1.3 OCC User Administration Module

Req #	Requirements Description
8.01	The system shall allow the OCC to manage (add, edit, delete) users within OCC so that appropriate staff can be given access to system.
8.02	The system shall allow the OCC to specify the role for each user within OCC so that users can be have access to appropriate functions.
8.03	The system shall allow the OCC to view audit log of activities performed by all users within the OCC so that they can track down activities performed by their staff.
8.04	The system shall allow the OCC to see users within OCC that are logged-in so that they know who are currently using the system.

4.1.1.4 OCC Report Module

Req #	Requirements Description
9.01	The system shall allow the OCC to generate a report of "List of Raffled Cases per Day" so that they can have a hardcopy of list of cases raffled per day.
9.02	The system shall allow the OCC to generate a report of "Summary of Raffled Cases per Day" so that they can check the distribution of cases across all the branches.
9.03	The system shall allow the CASHIER to generate summary reports of payment collected.

Assumptions and Limitations

The following are the assumptions and limitations for this component:

1. Since Payment Form is printed prior to issuance of Official Receipt, the OR No. will be manually written by the CASHIER on the payment form.
2. The ASSESSOR may opt not to save nor print assessment if party is just asking for computation of filing fees. The ASSESSOR can manually write the amount computed. The Payment Form will be printed only if Filing Party confirms that they will proceed with payment and filing of the case.
3. If Filing Party returns to pay filing fee after a day or so, the ASSESSOR shall make a new assessment.
4. If payment is via Postal Money Order, OCC will exchange it to cash thru the bank and treat it as cash payment.
5. Copying of Assessment is not supported unlike in JCMS, because the Case Title will always differ per case and this could cause copy-and-paste errors if used. If case has multiple count, the count field will be used instead.

Issues and Questions

The following are some issues and questions concerning this component that needs to be answered by TWG:

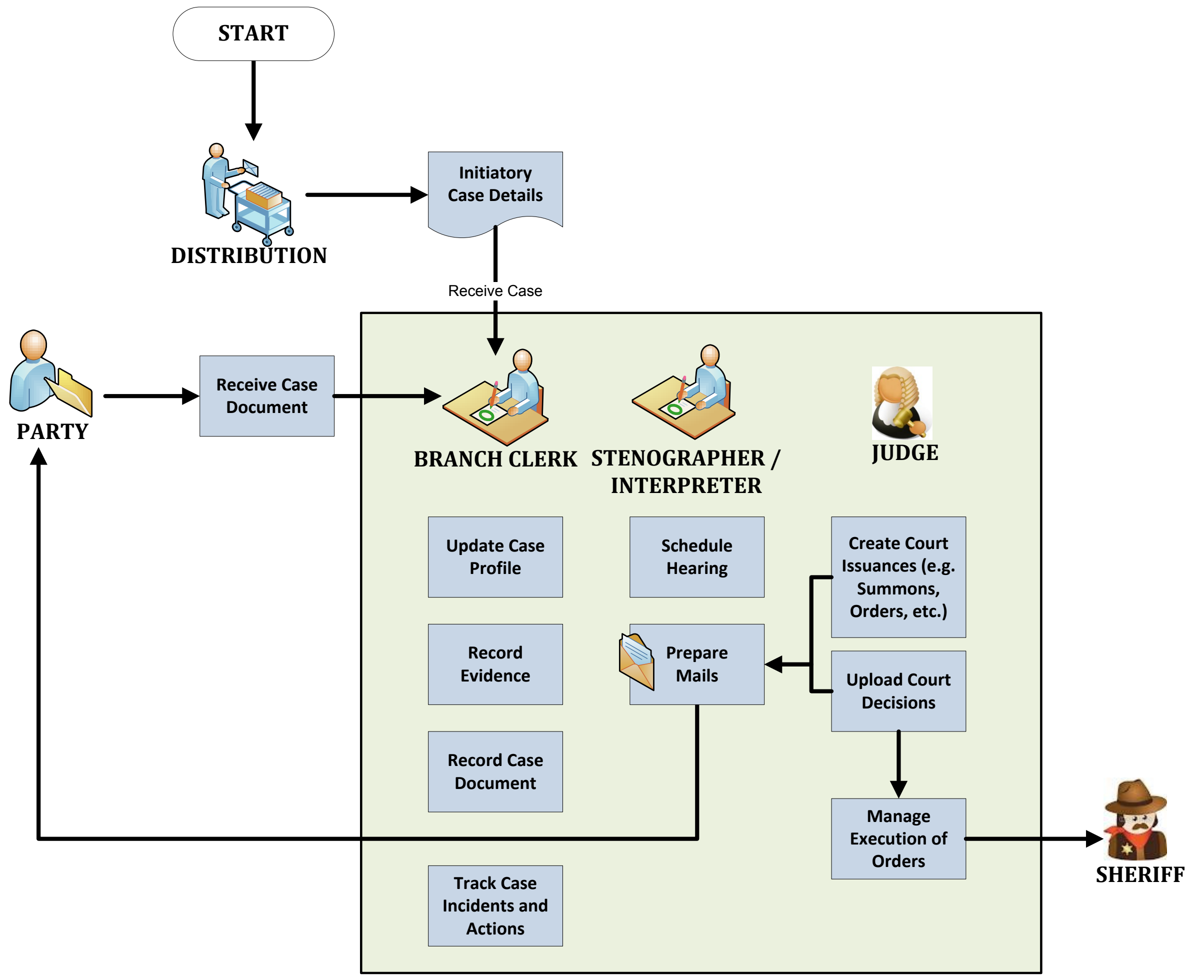
1. In payment, the term "Nature" is used for classifying the payment computation to be used for the case. However, this does not coincide with Nature of Case used by the BCC. Should we treat them as separate fields?
2. Need sample reports used by CASHIER for payment received.
3. Are there reports generated on raffling, other than raffle report?
4. Should we include support for editing of Case Number? We need copy of A.O. that describes the case numbering system.
5. For ePayment, is there an existing system in SC that needs to be integrated to produce consolidated reports across all the courts? Or generation of payment reports will suffice?

6. If pairing Judge is assigned to Vacant branch, is the vacant branch exempted from raffle?
7. What is the involvement of Executive Judge when a case is consolidated, if any?

4.2 The Court Branch Component

Diagram

The diagram below depicts the functionalities that are available for the Court Branch. These functionalities are available across the different stages (e.g. pre-trial, trial, etc) of case. The details of each case proceeding can be referenced in Appendix H.



General Description of Court Branch Modules

MODULE	DESCRIPTION OF ACTIONS INVOLVED
Case Profile	• Search Case • View Case Profile • Add, edit and delete Case Profile Information, Party Details, Counsel Details, Case References, Subsequent Documents, Payments and Notes • View Case History

MODULE	DESCRIPTION OF ACTIONS INVOLVED
Rollo/ Document Management	• Receive Subsequent Document • Search Case Document • Document Page Numbering
Outbound Document	• Creates Court Issuances, Resolution and Orders • Creates document from pre-formatted templates • Manage outbound documents and their recipients
Mail	• Print the mail labels and RRC • Monitor mails sent, served and confirmed receipt
Evidence	• Manage documentary, object, testimonial evidences • Add and delete sub-markings • Upload evidence image
Case Action	• Change party, track and stage of case • Keep track of case incidents and actions
Court Calendaring	• View an overview of calendar hearing events per month • View a daily view of the hearings • Management of court hearing schedule by branch • Scheduling of next hearing dates
Case Decision	• View add, edit, upload, download case decision • Upload multiple decisions (e.g. MR)
Management of Execution	• Add execution order note • Add execution service notification
User Administration	• Manage users, user groups, user roles and access rights • Manage user sessions
Dashboard/ Report	• Install/Add, Uninstall/Delete, view and move dashboard widgets. • View, Customize and Print Reports

Specific Requirements of Court Branch Modules

4.2.1.1 Court Branch Case Profile Module

Req #	Requirements Description
8.01	The system shall allow BRANCH STAFF to search for existing cases within their branch so that information about the case can be easily retrieved.
8.02	The system shall allow BRANCH STAFF to view the search case results so that cases matching the search criteria can be retrieved.
8.03	The system shall allow BRANCH STAFF to change the sort order and navigate by page number in search case results so that long list of cases can be easily retrieved.
8.04	The system shall allow the BRANCH STAFF to receive newly raffled case via barcode scanner so that OCC and BRANCH STAFF can track cases received by branch after being raffled.

Req #	Requirements Description
8.05	The system shall automatically change the status of a case to 'active' when raffled case is received.
8.06	The system shall allow BRANCH STAFF AND JUDGE the viewing of the Case Profile page that contains the different sections of case details so that all case related information can be easily viewed in one page.
8.07	The system shall allow the BRANCH STAFF to modify of Case Information so that updates and corrections can be recorded.
8.08	The system shall allow the BRANCH STAFF and JUDGE to view the Party Details section of the Case Profile page.
8.09	The system shall allow the BRANCH STAFF to add the list of Parties involved in a case so that additional parties can be recorded.
8.10	The system shall allow the BRANCH STAFF to edit and delete Party Details of a caseso that corrections or changes to party details can be recorded.
8.11	The system shall be able to automatically display other existing cases involving the parties listed so that the BRANCH STAFF or JUDGE is informed of possible related cases of the party.
8.12	The system shall allow the BRANCH STAFF and JUDGE to add the party record history as a note so that it can be easily referenced in the future.
8.13	The system shall allow the BRANCH STAFF to view Case References Details section of the Case Profile page so that they can view consolidated or referenced cases.
8.14	The system shall allow the JUDGE to record consolidated cases by associating a case reference so that consolidated cases are properly recorded.
8.15	The system shall allow the BRANCH STAFF to record related cases by associating a case reference so that related cases can be recorded.
8.16	The system shall allow the BRANCH STAFF and JUDGE to retrieve the change history of a case so that they can check who does what and when.
8.17	The system shall make provisions to interface with the existing RAIS (Roll of Attorneys Information System) so that initial list of Lawyers is readily available.
8.18	The system shall allow the BRANCH STAFF to add a new Counsel and associate to a case so that counsels representing the case can be recorded.
8.19	The system shall allow the BRANCH STAFF to add select a Counsel from an existing list (from RAIS) and associate to a case so that counsel details are not duplicated.
8.20	The system shall allow the BRANCH STAFF to edit and delete the Counsel details in a case so that corrections or changes to counsel can be recorded.
8.21	The system shall allow the BRANCH STAFF to record additional notes to a case so that additional notes or information about the case can be recorded.
8.22	The system shall allow the BCC to create a new assessment as order of payment for additional fees.

4.2.1.1 Court Branch Rollo/ Document Management Module

Req #	Requirements Description
9.01	The system shall allow the BRANCH STAFF to search documents received by the branch on all their cases so that retrieval and analysis of documents can be easily performed.
9.02	The system shall allow the BRANCH STAFF to record the page number on file so that pages of the Case Folder (Rollo) are properly recorded.
9.03	The system shall allow the BRANCH STAFF to sort the search documents results and navigate by page number so that long list of documents can be easily retrieved.
9.04	The system shall allow the BRANCH STAFF to receive subsequent documents of a case so that subsequent documents to the case can be recorded.
9.05	The system shall automatically assign a unique control number (barcode number) to each subsequent document received so it can be used as a reference to the document.
9.06	The system shall allow the BRANCH STAFF to create a case action after a subsequent document is added so that next actions can be recorded as future tasks.
9.07	The system shall allow the BRANCH STAFF to modify or delete the details of a document so that corrections can be recorded.

4.2.1.2 Court Branch Outbound Documents (Court Issuances, Resolutions and Orders)

Req #	Requirements Description
10.01	The system shall allow the BRANCH STAFF and JUDGE to create outbound document (e.g. Court Resolutions, Orders)so that it can be included as official document related to the case.
10.02	The system shall allow the BRANCH STAFF and JUDGE to attach/upload documents (doc, pdf) to a case so that electronic copies of documents issued can be retrieved in the system.
10.03	The system shall allow the BRANCH STAFF and JUDGE to draft Court Resolutions, Orders based on a pre-defined template so that common portions of the document (i.e. header, case title, etc.) and standard pro-forma documents (e.g. notifications, summons, etc.)do not have to be manually typed all the time.
10.04	The system shall allow the BRANCH STAFF to specify recipients and CC's to a document so that mail labels for the document can be recorded.
10.05	The system shall automatically generate mail labels (for Mail Module) after document is published so that mail labels will be immediately ready for printing.
10.06	The system shall automatically integrate outbound documents into the Case Folder (Rollo) so that outgoing documents (e.g. orders) are included in counting of page numbers.

4.2.1.3 Court Branch Mail Module

Req #	Requirements Description
11.01	The system shall allow the STENOGRAPHER to search for documents that are for delivery (Mails) so that all mail can be tracked.
11.02	The system shall allow STENOGRAPHER to change the sort order and navigate by page number in search mail results so that long list of mails can be easily retrieved.
11.03	The system shall allow the STENOGRAPHER to view the list of documents for delivery along with the recipient's information (e.g. Name, Address) so that mail can be easily monitored.
11.04	The system shall allow the STENOGRAPHER to print the mail labels based on recipient's information (i.e. Name, Address) so that mail labels do not have to be manually typed and saves time of STENORAPHER.
11.05	The system shall allow the STENOGRAPHER to print multiple mail labels in one piece of paper so that no waste in paper is produced when printing multiple mail labels.
11.06	The system shall allow the STENOGRAPHER to generate list of mailsto be personally served for the day so that this can be used as guide for the SHERIFF on his/her delivery rounds.
11.07	The system shall allow the STENOGRAPHER to print Registry Return Card (RRC) so that RRC do not have to be manually typed and saves time of STENOGRAPHER.
11.08	The system shall allow the STENOGRAPHER to add a recipient for a document for deliveryso that additional recipients can be recorded.
11.09	The system shall allow the STENOGRAPHER to edit and delete recipient for a document for delivery so that corrections or changes to recipients can be recorded.
11.10	The system shall allow the STENOGRAPHER to indicate the mode of delivery (i.e. mail, personally served) and mail status (e.g. sent, confirmed receipt, served) so that status of mail piece is recorded.

4.2.1.4 Court Branch Evidence Module

Req #	Requirements Description
12.01	The system shall allow the BRANCH STAFF and JUDGE to view the evidence section of the Case Profile.
12.02	The system shall allow the BRANCH STAFF to add an evidence entry so that evidence is recorded.
12.03	The system shall allow the BRANCH STAFF to edit and delete an evidence entry so that corrections or changes to evidence entries can be recorded.
12.04	The system shall allow the BRANCH STAFF to add markings and sub-marking entry to evidence so that evidence with multiple sub-markings (e.g. documentary evidence with signature) can be recorded.

Req #	Requirements Description
12.05	The system shall allow the BRANCH STAFF and JUDGE to edit and delete marking and sub-marking entry to evidence so that corrections to sub-marketing can be recorded.
12.06	The system shall allow the BRANCH STAFF and JUDGE to upload an image to the evidence so that additional proof can be recorded.

4.2.1.5 Court Branch Case Action Module

Req #	Requirements Description
13.01	The system shall allow the BRANCH STAFF and JUDGE to view the case incidents and actions so that case activities can be monitored.
13.02	The system shall allow the BRANCH STAFF to add a case incident so that case activities can be recorded.
13.03	The system shall allow the BRANCH STAFF to edit and delete a case incident so that changes in case activities can be recorded.
13.04	The system shall allow the BRANCH STAFF and JUDGE to add action in response to an incident so that case activities can be recorded.
13.05	The system shall allow the BRANCH STAFF and JUDGE to edit and delete action in response to an incident so that changes can be recorded.
13.06	The system shall allow the case actions to be applied to one or more party so that case actions involving specific parties can be recorded.
13.07	The system shall allow the BRANCH STAFF and JUDGE to view case actions specific to a party so that activities involving specific party can be separately retrieved.
13.08	The system shall keep track the stages (Arraignment, Pre-Trial, Trial, etc.) of the case along with start and end dates so that duration of the case stage can be tracked and analyzed.
13.09	The system shall allow BCC and JUDGE to move the case from one stage to next (e.g. Pre-trial to Trial) so that progression of the case can be recorded.
13.10	The system shall check and warn the user if stage completion criteria is not satisfied prior to moving to next stage so that essential stage information is recorded.
13.11	The system shall allow selection of Case Incidents based on the current stage(e.g. Arraignment, Pre-Trial, etc.) of the case so that case incidents are restricted to allowable set of incidents only.
13.12	The system shall allow selection of 'Others' in Case Incidents so that incidents that are not in allowable set can be recorded.
13.13	The system shall allow selection of Case Actions based on Case Incidents of the case so that case actions are restricted to allowable set of actions only.
13.14	The system shall allow selection of 'Others' in Case Actions so that actions that are not in allowable set can be recorded.
13.15	The system shall allow the BRANCH STAFF and JUDGE to adjust the duration of case actions when needed so that extension in schedule can be recorded.

Req #	Requirements Description
13.16	The system shall automatically keep track of the original date prior to any duration adjustment so that duration of extension can be recorded.
13.17	The system shall allow the BRANCH STAFF and JUDGE to filter the case actions and incidents by type (e.g. motion, order, etc.)
13.18	The system shall allow the BRANCH STAFF and JUDGE to add comment in a case action so that additional notes can be recorded.

4.2.1.6 Court Branch Calendaring Module

Req #	Requirements Description
14.01	The system shall be able to display a monthly view of the calendar containing details on the number of hearing per hearing type (i.e. arraignment, pre-trial, trial, judgment, commitment) so that volume of hearings per day for the whole month can be visually reviewed for scheduling purposes.
14.02	The system shall be able to display a per-day view of the calendar containing hearing details, i.e. case number, case title, parties involved and other details, sorted by hearing type so that interested parties can easily view the court calendar.
14.03	The system shall allow the filtering of the calendar by session (i.e. AM and PM sessions) so that scheduling is grouped by morning and afternoon sessions.
14.04	The system shall allow BRANCH STAFF to manage calendar within their respective branches so that court schedule is controlled within each branch.
14.05	The system shall allow BRANCH STAFF to print their court calendar so that it can be posted outside the branch for public consumption.
14.06	The system shall allow BCC to specify the maximum hearing schedule for their branch. (e.g. how many arraignments are allowed during Monday AM) so that system can provide warning if hearing is exceeding maximum capacity.
14.07	The system shall allow INTERPRETER to automatically find the nearest available dates when scheduling case hearing so that scheduling can be efficient.
14.08	The system shall allow INTERPRETER to manage (add, edit, delete) holiday / no hearing days for their branch so that holidays/no hearing days are excluded from scheduling.
14.09	The system shall allow the INTERPRETER to schedule hearing for a case based on case actions so that court hearings are properly scheduled.
14.10	The system shall allow the INTERPRETER to change hearing schedule and ask for reason of rescheduling so that changes in court schedule can be recorded.

4.2.1.7 Court Branch Case Decision Module

Req #	Requirements Description

Req #	Requirements Description
15.01	The system shall allow the BCC STAFF and JUDGE to view the Case Decision Details section of the Case Profile page.
15.02	The system shall allow the JUDGE to add a Case Decision entry so that Decisions can be recorded.
15.03	The system shall allow the JUDGE to edit and delete a Case Decision entry so that corrections can be recorded and reverted.
15.04	The system shall allow the user to attach file (doc, pdf) so that actual decision document can be recorded to the case.
15.05	The system shall automatically change the status of a case to 'decided' once a decision is uploaded.

4.2.1.8 Court Branch Management of Execution Module

Req #	Requirement Descriptions
17.01	The system shall allow the JUDGE to issue an execution order so that court decisions can be executed.
17.02	The system shall allow the BRANCH STAFF to view list of execution orders so that they can plan when and how to execute the order on behalf of the SHERIFF.
17.03	The system shall allow the BRANCH STAFF to update status of execution orders so that activities performed on the court order are recorded on behalf of the SHERIFF.
17.04	The system shall allow the BRANCH STAFF to add notes on execution order so that any remarks can be recorded for future reference on behalf of the SHERIFF.
17.05	The system shall allow the BRANCH STAFF to upload the Sheriff's report so that result of execution can be recorded.

4.2.1.1 Court Branch User Administration Module

Req #	Requirements Description
18.01	The system shall allow the BCC to manage (add, edit, delete) users within their branch so that appropriate staff can be given access to system.
18.02	The system shall allow the BCC to specify the role for each user within their branch so that users can be have access to appropriate functions.
18.03	The system shall allow the BCC to view audit log of activities performed by all users within their branch so that they can track down activities performed by their staff.
18.04	The system shall allow the BCC to see users within their branch that are logged-in so that they know who are currently using the system.

4.2.1.2 Court Branch Dashboard Module

Req #	Requirements Description

Req #	Requirements Description
19.01	The system shall allow the BRANCH STAFF and JUDGE to view new cases raffled to their branch so they can easily identify cases that they should receive from the OCC.
19.02	The system shall allow the BRANCH STAFF and JUDGE to view a list of actions overdue so that they can prioritize their actions accordingly.
19.03	The system shall allow the BRANCH STAFF and JUDGE to view a list of overstaying detainees so that they can inform parties of their detention status.
19.04	The system shall allow the BRANCH STAFF and JUDGE to view a list of reminders on tasks that are about to be due so that they can organize their case actions by priority.
19.05	The system shall allow the BRANCH STAFF and JUDGE to view a pie chart depicting the summary of docketed cases so that they have indicator of volume of cases.
19.06	The system shall allow the BRANCH STAFF and JUDGE to view a bar graph depicting the summary of active cases so that they have visual indicator on breakdown of their active cases.
19.07	The system shall be allow the BRANCH STAFF and JUDGE to view a bar graph depicting the summary of the aging of the cases so that they know the volume of cases that are taking a long time.
19.08	The system shall be allow the BRANCH STAFF and JUDGE to view table of aging cases per year and case category so that they can retrieve exact cases that are taking a long time.

Assumptions and Limitations

- The list of case incidents and actions will be provided by TWG for analysis.
- The system assumes one courtroom is assigned to each branch and does not schedule a courtroom with multiple branches.

Issues and Questions

- What are the different completion criteria per stage? For example, what is required before a case move from Pre-Trial to Trial?
- Can we define a standard set of document templates (e.g. summons, subpoena, etc.) that are issued by the court?
- How do we add miscellaneous recipients who are not parties or counsel?
  - Under Others(e.g. Commissioners, Guardians, Receivers) under the Case Profile

4.3 The CMO Component

General Description of CMO Modules

MODULE	DESCRIPTION OF ACTIONS INVOLVED

Official SC Reports	• Generation of official SC Report

Specific Requirements

4.3.1.1 Official SC Reports Module

Req #	Requirements Description
20.01	The system shall generate the set Monthly report for cases for RTC (General Jurisdiction) with Multiple Sala so that it can be used by CMO in generating monthly, semestral, annual report for all regular RTC courts.
20.02	The system shall generate Monthly report for cases for RTC Special Court (e.g. Family, Commercial, etc.) so that it can be used by CMO in generating monthly report for all Family Courts.
20.03	The system shall generate list of cases by status per Branch per Month so that it can be used by CMO in Cases Submitted for Decision within the month.
20.04	The system shall generate list of cases by status per Branch per Month so that it can be used by CMO in Cases Previously Submitted for Decision but still Undecided.
20.05	The system shall generate report for Profile of Accused (Item No. VII) so that it can be used by CMO as part of official SC report.
20.06	The system shall generate report for Cases Under Mediation (Item No. VIII) so that it can be used by CMO as part of official SC report.
20.07	The system shall generate report for Data on Probation (Item No. IX) so that it can be used by CMO as part of official SC report.
20.08	The system shall generate report for Warrants, TROs, Injunction (Item No. X) so that it can be used by CMO as part of official SC report.
20.09	The system shall generate report for Aging of Pending (Item No. XI) so that it can be used by CMO as part of official SC report.
20.10	The system shall generate report for Decisions/Final or Interlocutory Orders Elevated on Appeal / Certiorari during the (Item No. XII) so that it can be used by CMO as part of official SC report.
20.11	The system shall generate report for Court Sessions during the Month during the (Item No. XIII) so that it can be used by CMO as part of official SC report.
20.12	The system shall generate report for Number of Writs Issued during the Month during the (Item No. XV) so that it can be used by CMO as part of official SC report.
20.13	The system shall generate List of Cases that is grouped by Case Category so that it can be used by CMO as part of official SC report.

Assumptions and Limitations

- The system does not track number of Marriages Solemnized. Thus, a blank field will be provided on the report for manual entry.

Issues and Questions

- None

4.4 The Admin Component

General Description of Modules

MODULE	DESCRIPTION OF ACTIONS INVOLVED
System Administration	• Manage drop down values, system codes, raffle rules and reports
User Administration	• Manage users, user groups, user roles and access rights • Manage user sessions
Dashboard/ Report	• Install/Add, Uninstall/Delete, view and move dashboard widgets. • View, Customize and Print Reports

Specific Requirements

4.4.1.1 System Administration Module

Req #	Requirements Description
21.01	The system shall allow the SYSTEM ADMINISTRATOR to manage the list of Court Branches so that new branches or change in branch assignment can be easily configured.
21.02	The system shall allow the SYSTEM ADMINISTRATOR to manage the System Codes that contains the values used for drop-downs (i.e. fund type, case status, etc.) so that additional changes on drop-down values can be easily configured.
21.03	The system shall allow the SYSTEM ADMINISTRATOR to manage the raffle rules.
21.04	The system shall allow the SYSTEM ADMINISTRATOR to manage the list of Case Stage, Incidents and Actions so that changes on values can be easily configured.
21.05	The system shall allow the SYSTEM ADMINISTRATOR to manage User Roles and their respective Access Rights so that permissions to functionalities can be easily configured.
21.06	The system shall allow the SYSTEM ADMINISTRATOR to manage the default Document Templates that are used for court notifications.

4.4.1.2 User Administration Module

Req #	Requirements Description
22.01	The system shall allow the SYSTEM ADMINISTRATOR to manage (add, edit, delete) users across all court branches so that users can be given access to system.
22.02	The system shall allow the SYSTEM ADMINISTRATOR to specify the role for each user across all court branches so that users can be given appropriate permissions.

Req #	Requirements Description
22.05	The system shall allow the activation/deactivation of a user.
22.06	The system shall be able to display a list of users currently online so that users who are logged-in are known.
22.07	The system shall allow the SYSTEM ADMINISTRATOR to force logout an online user so that they can be logged-out in case they didn't log-out properly.
22.08	The system shall provide a login page for all users to enter their username and password so that they can enter their credentials to use the system.
22.09	The system shall check for the username and password and provide appropriate access rights so that access and permission to system functions are protected.
22.10	The system shall allow access of pages only to users who have successfully logged-in so that the system is protected from unauthorized access.
22.11	The system shall allow ALL USERS to update their own user profile so that they take control of their account's personal information.
22.12	The system shall allow ALL USERS to change their password so that they can secure their login credential based on their personal knowledge.
22.13	The system shall restrict user to login one at a time only so that multiple account login is avoided.

Assumptions and Limitations

- System administrator will be available for RTC and MeTC to perform system maintenance, system monitoring, backup and restore, and computer troubleshooting.

Issues and Questions

- Please provide list of reports from QC guidelines..

4.5 The Public Kiosk Component

General Description of Modules

MODULE	DESCRIPTION OF ACTIONS INVOLVED
Case Profile	• Search cases and status • View, sort and filter search results
Directory and Maps	• Shows Court Directory of RTC and MeTC • Shows the map of the QC HOJ Building and location of each Court Branch
Court Calendaring	• View an overview of calendar hearing events • View a daily view of the hearings

Specific Requirements for PAO/DOJ/Public Kiosk

4.5.1.1 Case Profile Module

Req #	Requirement Descriptions
23.01	The system shall allow PUBLIC USERS to search for existing so that information (e.g. handling branch) about the case can be easily retrieved.
23.02	The system shall allow PUBLIC USERS to view the search case results so that cases matching the search criteria can be retrieved.
23.03	The system shall allow PUBLIC USERS to change the sort order and navigate by page number in search case results so that long list of cases can be easily retrieved.
23.04	The system shall make provisions to limit access for the public kiosk so that only Case No, Case Title, Branch, Status, Stage and next hearing dates are available for viewing.
23.05	The system shall make provisions to exclude family court cases from the public kiosk so that information about CICL is secured.

4.5.1.2 Court Calendaring

Req #	Requirement Descriptions
24.01	The system shall be able to display a per-day view of the calendar containing hearing details, i.e. case number, case title, parties involved so that parties can check for their hearing schedule.
24.02	The system shall allow the filtering of the calendar by session, i.e. AM and PM sessions.
24.03	The system shall allow the filtering of the calendar by branch.

4.5.1.3 Directory and Maps

Req #	Requirement Descriptions
25.01	The system shall allow PUBLIC USERS to look at the court directory of both MeTC and RTC Court Branches.
25.02	The system shall allow PUBLIC USERS to look at the map of each floor of QC HOJ along with the Court location.

Assumptions and Limitations

- The Public Attorney’s Office (PAO)/DOJ and other QC HOJ users will have similar access and features available to the public.
- The Public Kiosk will only be launched after the court has confirmed that a complete list of cases is available and updated in the system.

Issues and Questions

- Should we include facility for Court Directory and Maps? Will it be more effective than the current map displayed on Ground Floor?

5 DEFINITION OF TERMS

Terms	Description
ABA	American Bar Association
BCC	Branch Clerk of Court
CMO	Court Management Office
HOJ	Hall of Justice
JCMS	Judicial Case Management System
OCC	Office of the Clerk of Court
QCeC	Quezon City eCourt
RAIS	Roll of Attorneys Information System
BRANCH STAFF	Includes Branch Clerk of Court, Stenographer and Interpreter

6 APPENDICES

6.1 Appendix A – List of Values for Payment Fees and Nature of Case

6.2 Appendix B – List of Values for Case Category

6.3 Appendix C – List of Values for Court Type

6.4 Appendix D – List of Values for Nature of Case

6.5 Appendix E – List of Values for Document Type

6.6 Appendix F – List of Values for Maximum Sentence

6.7 Appendix G – List of Values for Evidence Type and Status

6.8 Appendix H – List of Values for Case Actions

7 Revision History

Version No.	Date	Description of Changes	Author
V0.20	April 25, 2012	Revisions based on review meeting with ABA-ROLI	Allan Tan
V0.21	May 7, 2012	Added diagrams and clear separate of modules	Allan Tan