**System Sequence Diagrams**

**Version 1.3**

**Project Management App**

**Team A**

**CSC-354**

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**REVISION HISTORY**

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| 1.3 | Jennifer Li | I edited the sub section titles and paragraphs. | 10/27/2015 |
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**1.0 INTRODUCTION**

This document shows the infrastructure with the system as a whole. The diagrams, will describe a particular scenario of the desired use case. The input, which is generated by external actors and the output, which is generated by the system. Addition to that it will present, the order of the how the system will be affected by the actor’s action. System sequence diagram will be defined first; next, the UML notation for the system sequence diagram is explained; finally, the system sequence diagram for the project management app will be presented.

**1.1 What Is A System Sequence Diagram?**

System sequence diagram is a visual representation of a distinct use case. Typically, in a system sequence diagram, it captures the behavior of an individual use case scenario. The diagram would show the order, of how the objects and the messages that are passed between them, interact with in the use case. In simpler terms, the system sequence diagram will show a scenario of a use case that is triggered by an actor. For example, in an ATM scenario, if an actor wants to withdraw money; the actor would input the amount that he wanted and the system will either withdraw the money from his account and dispense it or deny his request of withdraw because of insufficient funds.

**1.2 System Sequence Diagram Notation**

This section explains the notation use in system sequence diagrams. In a system sequence diagram a stick figure is used to represent the actor that has a specific role. A rectangular box that contains “:System” which represents the system as a black box. The diagram also contains two types of arrowed lines that shows the input and output, between the actor and the system. The first arrowed line is a solid arrowed line pointing to the system, representing the sent input message from the actor. The second arrowed line is a dashed lined arrow pointing to the actor, representing the output message sent from the system. Last but not lease, system sequence diagrams have a life line or a duration which represents the session in which the interactions take place.

**1.3 System Sequence Diagrams for Project Management App**

The project management app, will have two major components involved in the system sequence diagram. The first component would be the actor, in these cases the actor can be a project leader or a project member. The other major component would be the system. There will be a total of five system sequence diagrams each containing the appropriate notation. Since the project management app has two specific actors, our team decide to pick one use case that affects all actors. Two specific use cases that will affect the project leader and two specific use cases that will affect the project member.

The system sequence diagrams of the Project Management App are listed below.

:System

Leader

Prompts user for their userName and password

Login(userName, password)

successMessage: “Welcome back, username”

Successful(successMessage)

errorMessage: “You have entered the wrong userName and/or password.”

\*clear fields\*

\*prompt user for forgot password\*

Unsuccessful(errorMessage)

:System

Leader

Successful()

Unsuccessful()

Messages Here

Messages Here

Messages Here

AddMember(userName, projectName, inviteMessage)

Leader

:System

Messages Here

ReviewTask(task, userName, comment)

Messages Here

Successful()

Messages Here

Unsuccessful()

:System

Leader

ViewTaskProgress()

Successful()

Unsuccessful()

Messages Here

Messages Here

Messages Here

:System

Leader

Messages Here

UploadDocument(document, taskName)

Messages Here

Successful()

Messages Here

Unsuccessful()