# SOFTWARE REQUIREMENT SPECIFICATIONS (SRS)

## SRS-FSES-SG-V2.00

For the

# First Stage Evaluation System (FSES)

Prepared For:

**Faculty of Artificial Intelligence** 

Prepared By:

SG Co.

MUHAMMAD ADIL BIN ELLI (MAN231009) AJLA IZZATI BINTI SHAHANIZAM (MAN231001) KHADIJAH BINTI ZAHURIN (MAN231013)

Authenticated by: Ts. Dr. Othman bin Mohd Yusop

Date:

Approved by: Ts. Dr. Haslina Binti Md. Sarkan

Date:

	DOCUMENT IDENTIFICATION				
SG	SYSTEM NAME	FORMAT	VERSION	PAGE	
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	1	
COMPANY					

SIGNATURE	6
CHANGE HISTORY	7
LIST OF FIGURES	8
LIST OF TABLES	9
1 INTRODUCTION	
1.1 PURPOSE, SCOPE AND OBJECTIVES	10
1.2 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS	
1.3 REFERENCES	12
1.4 OVERVIEW OF DOCUMENT	13
2 OVERALL DESCRIPTION	
2.1 INTRODUCTION	14
2.2 PRODUCT PERSPECTIVE	
2.2.1 PRODUCT INTERFACES	
2.3 PRODUCT FUNCTIONS	16
2.4 ASSUMPTIONS AND CONSTRAINTS	
R1: Password	17
R2: Login Attempts	17
R3: Main supervisor's eligibility	
R4: Co-supervisor's eligibility	
R5: Examiner's eligibility	
R6: Chairperson's eligibility	
3 REQUIREMENTS SPECIFICATION	
3.1 CSCI EXTERNAL REQUIREMENTS	
3.1.1 INTERFACE: OFFICE ASSISTANT	
3.1.1.1 IDENTIFICATION	
3.1.1.2 DESCRIPTION	
3.1.1.3 ASSOCIATION	
3.1.2 INTERFACE: RESEARCH SUPERVISOR	
3.1.2.1 IDENTIFICATION	
3.1.2.2 DESCRIPTION	_
3.1.2.3 ASSOCIATION	
3.1.3 INTERFACE: PROGRAM COORDINATOR	
3.1.3.1 IDENTIFICATION	
3.1.3.2 DESCRIPTION	
3.1.3.3 ASSOCIATION	
3.2 FSES CAPABILITY REQUIREMENTS	20



DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	2

3.2.1 LOGIN USE CASE (SRS_REQ_100)	21
3.2.1.1 Brief Description	21
3.2.1.2 Characteristic of Activation	21
3.2.1.3 Pre-Condition	21
3.2.1.4 Description	21
3.2.1.4.1 Basic Flow	21
3.2.1.4.2 Alternative Flow	22
A1: Change Password	22
A2: Reset Password	22
3.2.1.4.3 Exception Flow	22
E1: Invalid Password	22
3.2.2 PREPARE STUDENT LIST USE CASE (SRS_REQ_200)	23
3.2.2.1 Brief Description	23
3.2.2.2 Characteristic of Activation	23
3.2.2.3 Pre-Condition	23
3.2.2.4 Description	23
3.2.2.4.1 Basic Flow	23
3.2.2.4.2 Exception Flow	24
E2: Main supervisor is not eligible	24
E3: Co-supervisor is not eligible	24
3.2.3 MANAGE MASTERLIST USE CASE (SRS_REQ_300)	25
3.2.3.1 Brief Description	25
3.2.3.2 Characteristic of Activation	25
3.2.3.3 Pre-Condition	25
3.2.3.4 Description	25
3.2.3.4.1 Basic Flow	25
3.2.4 NOMINATE EXAMINERS USE CASE (SRS_REQ_400)	26
3.2.4.1 Brief Description	26
3.2.4.2 Characteristic of Activation	26
3.2.4.3 Pre-Condition	26
3.2.4.4 Description	26
3.2.4.4.1 Basic Flow	26
3.2.4.4.2 Alternative Flow	27
A3: Modify research title and examiners	27
A4: Postpone student's FSE	27
A5: View list of students under supervision	27
3.2.4.4.3 Exception Flow	27
E4: Examiner is not eligible	27



DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	3

3.2.5 ASSIGN CHAIRPERSON USE CASE (SRS_REQ_500)	28
3.2.5.1 Brief Description	28
3.2.5.2 Characteristic of Activation	. 28
3.2.5.3 Pre-Condition	28
3.2.5.4 Description	28
3.2.5.4.1 Basic Flow	28
3.2.5.4.2 Alternative Flow	29
A6: Lock examiners nomination	29
A7: View list of students	29
A8: View list of students and their FSE details by program and evaluation	
type	
A9: View list of students postponing their FSE	
A10: View list of examiners and how many sessions they are examining	
A11: View list of chairpersons and how many sessions they are chairing	
A12: View graph showing a summary of the FSE details	
3.2.5.4.3 Exception Flow	
E5: Chairperson is not eligible	
3.3 SYSTEM INTERNAL INTERFACE	
3.3.1 CSCI DATA ELEMENT REQUIREMENTS	
3.3.1.1 Boundary Class	
3.3.1.1.1 LoginPage	
3.3.1.1.2 ChangePasswordPage	
3.3.1.1.3 DashboardPage	
3.3.1.1.4 StudentDetailsPage	
3.3.1.1.5 MasterlistPage	
3.3.1.2 Control Class	
3.3.1.2.1 UserRoutes	
3.3.1.2.2 EvaluationRoutes	
3.3.1.3 Entity Class	
3.3.1.3.1 UserDB	
3.3.1.3.2 EvaluationDB	
3.4 OTHER REQUIREMENTS	
3.4.1 RELIABILITY	35
3.4.2 MAINTAINABILITY	
3.4.3 PERFORMANCE	
3.4.4 SECURITY	
3.4.5 CAPACITY	
3.4.6 EXPANDABILITY	35



DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	4

APPENDICE	4
3.4.8 DESIGN CONSTRAINTS	39
3.4.7 TRACEABILITY REQUIREMENTS	30

Vi
<b>.</b>
STARTUP GANG

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	5

### **SIGNATURE**

	Name	Date
Verified by:  Software Work Package Manager	Ajla Izzati Binti Shahanizam	
Authenticated by:  Project Manager	Ts. Dr. Othman bin Mohd Yusop	
Approved by:  Client	Ts. Dr. Haslina Binti Md. Sarkan	

Software: Google Doc

#### Archiving place:

https://docs.google.com/document/d/1SPPuPKfapCvnwngHQPKh03TzvScS7mPfgieQxSsM264/edit?usp=sharing

Copies available: .DOC, .PDF format

	DOCUMENT IDENTIFICATION				
	SYSTEM NAME	FORMAT	VERSION	PAGE	
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	6	

# **CHANGE HISTORY**

REVISION	DESCRIPTION
1.0	First draft.
2.0	Revision after Software Requirements Review (SRR).
3.0	
4.0	

Ind. + Date	1.0	2.0	3.0	4.0
Written by				
Verified by				
Authenticated by				
Approved by				

SG	DOCUMENT IDENTIFICATION			
	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	7

# **LIST OF FIGURES**

Figure 1: FSES Product Prospective Diagram	15
Figure 2: FSES Context Diagram	
Figure 3: FSES Use Case Diagram	20
Figure 4: Login Use Case Diagram	2 <sup>-</sup>
Figure 5: Prepare Student List Use Case Diagram	23
Figure 6: Manage Masterlist Use Case Diagram	
Figure 7: Nominate Examiners Use Case Diagram	26
Figure 8: Assign Chairperson Use Case Diagram	28

STARTUP GANG
COMPANY

DOCUMENT IDENTIFICATION					
SYSTEM NAME	FORMAT	VERSION	PAGE		
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	8		

# **LIST OF TABLES**

Table 1: List of Acronyms and Abbreviations	1
Table 2:Traceability Matrix	.36

STARTUP GANG

DOCUMENT IDENTIFICATION					
SYSTEM NAME	FORMAT	VERSION	PAGE		
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	9		

### 1 INTRODUCTION

### 1.1 PURPOSE, SCOPE AND OBJECTIVES

#### **Purpose**

The purpose of this document is to specify the user requirements for the First Stage Evaluation System (FSES) of the Advanced Informatics Department (AID), Faculty of Technology and Informatics (FTIR).

This document describes the required system facilities and system performance characteristics.

#### **Objectives**

The objectives of this document are to:

- 1. Establish the User Requirements for the FSES.
- 2. Determine the scope of the systems needed to meet the user requirements.
- 3. Identify the system capacity and the requirements for future expansion.
- 4. Provide the basis for the development of the system.

#### Scope

#### **Software Interface**

The function of this system will be interfacing particularly to:

- 1. The Office Assistant.
- 2. The Research Supervisor.
- 3. The Program Coordinator.

#### **Software Documentation**

A complete and easily understood documentation of the FSES requirements will be provided to aid in the development of the system. The following deliverables will be produced:

1. Software Requirements Specification (SRS)

STARTUP GANG	DOCUMENT IDENTIFICATION				
	SYSTEM NAME	FORMAT	VERSION	PAGE	
	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	10	

### 1.2 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

#### **Definitions of Terms**

The following terms have special meanings in this document.

- 1. The word shall, implies a mandatory requirement.
- 2. The word should, implies a desirable requirement.
- 3. The word will, implies a mandatory requirement outside the scope of this document.
- 4. The word may, implies a desirable requirement outside the scope of this document.

The following terms have been defined for the context of this project:

- 1. Client: The entity that specifies requirements for and accepts delivery of a new or modified software product and its documentation.
- 2. Project Deliverable: A work product delivered to the client, including requirements, specifications, design documentation, code, test results, instructions, training aids, manuals, and maintenance documentation.
- 3. Software Project: The set of activities required to meet the terms of a project agreement, with specific start and end dates, objectives, constraints, responsibilities, budget, and schedule.

#### **Acronyms and Abbreviations**

Table 1 presents the list of acronyms and abbreviations.

**Table 1: List of Acronyms and Abbreviations** 

Acronyms	Meaning
AID	Advanced Informatics Department
FSE	First Stage Evaluation
FSES	First Stage Evaluation System
FTIR	Faculty of Technology and Informatics

SG	DOCUMENT IDENTIFICATION			
	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	11

### 1.3 REFERENCES

- 1. SG Co. (2024), Software Project Management Plan (SPMP-FSES-SG-V1.00)
- 2. FAI User Requirements Specification for First Stage Evaluation System
- 3. FAI (Man\_Doc\_003) Software Specification Review Invitation
- 4. IEEE 830-1998 IEEE Recommended Practice for Software Requirements Specifications.
- 5. Object Management Group (2010), Unified Modelling Language (OMG UML 2.3), Superstructure (10-05-05).

SG	DOCUMENT IDENTIFICATION				
	SYSTEM NAME	FORMAT	VERSION	PAGE	
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	12	

### 1.4 OVERVIEW OF DOCUMENT

The purpose of the FSES SRS is to provide a detailed overview of the software product that should be developed and to guide the SG team about the user requirements during the development of the system. The overall description of the product's interfaces, functions, user characteristics, rules and constraints, assumptions and dependencies will be captured in Chapter 2 of this document. The following Chapter 3 will discuss each specific requirement in detail. The last part of this document would be the appendices where all relevant sequence diagrams are illustrated.

,	20
4	347
7	STARTUP GANG

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	13

### 2 OVERALL DESCRIPTION

#### 2.1 INTRODUCTION

All research students at Universiti Teknologi Malaysia need to undergo two major evaluations. The first is the First Stage Evaluation, and the second is the Viva. Viva is where students defend their research work in front of a panel of examiners, and First Stage Evaluation is where research students defend their research proposal. The First Stage Evaluation is mandatory for all second-semester Master of Philosophy students, third-semester Doctor of Philosophy students, and Doctor of Software Engineering students who have completed all their taught courses. The process begins with the faculty's Office Assistant preparing a list of students required to do their First Stage Evaluation. Then the students' Supervisor must nominate examiners for the evaluation session. Finally, the Research Program Coordinator will have to assign chairpersons to each evaluation session and generate a list to be endorsed by the academic committee. The process is done manually, making it tedious and prone to error. To assist the Research Program Coordinator, as the developers, your team is required to develop a First Stage Evaluation System (FSES). The main aim of FSES is to make the nomination of examiners and chairpersons for the department's First Stage Evaluation as seamless as possible, with proper checking and validation. The Office Assistant should be able to upload/enter the list of students who must do their First Stage Evaluation, with the names of their supervisors and co-supervisors and other details. The Supervisors should be able to nominate examiners for their students. The Program Coordinator should be able to assign a chairperson for each First Stage Evaluation session and generate a list to be endorsed.

4	
	STARTUP GANG

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	14

#### 2.2 PRODUCT PERSPECTIVE

FSES is a web-based system that uses the client-server model. The Figure 1 below outlines the flow of interaction between the client, the various modules within the system and the central database.

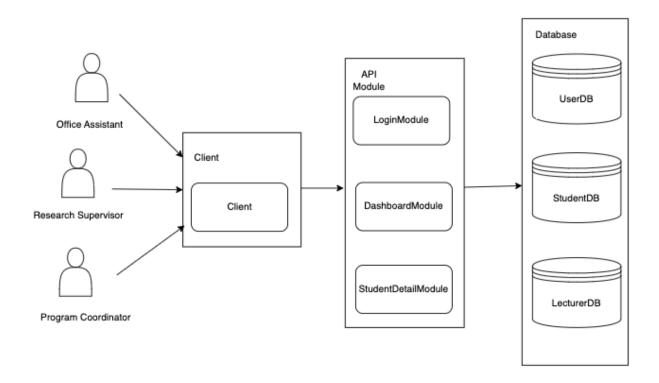


Figure 1: FSES Product Prospective Diagram

#### 2.2.1 PRODUCT INTERFACES

The system shall interface with

- 1. The Office Assistant who is responsible for preparing a list of students eligible for First Stage Evaluation.
- 2. The Research Supervisor who is responsible for nominating examiners based on their student's research title.
- 3. The Program Coordinator who is responsible for assigning a chairperson for each First Stage Evaluation session and generating a list to be endorsed by the academic committee.

	DOCUMENT IDENTIFICATION				
	SYSTEM NAME	FORMAT	VERSION	PAGE	
	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	15	

#### 2.3 PRODUCT FUNCTIONS

The system functions to be implemented are:

- 1. Login function to be used by all users. The password must be composed of alphanumeric characters which should not be less than 8 characters.
- 2. A function to allow the Office Assistant to enter the list of students, their supervisors and other relevant details.
- 3. Examiner nomination function to allow the Supervisor to nominate three examiners according to rules prepared by the academic office, based on the student's research title. The Supervisor should also be allowed to decline nominating examiners to a student if the student is postponing the First Stage Evaluation
- 4. Chairperson assignment function to allow the Program Coordinator to assign chairpersons to each student, according to the rules prepared by the academic office. (It would be best if this function could be automated, rather than the Program Coordinator assigning manually
- 5. A function that shows:
  - a. The list of students and their First Stage Evaluation details. The list should also show a graph summarising the students undergoing the First Stage Evaluation and students postponing their First Stage Evaluation.
  - b. The list of examiners and how many sessions they are examining.
  - c. The list of chairpersons and how many sessions they are chairing.

	DOCUMENT IDENTIFICATION				
STARTUP GANG	SYSTEM NAME	FORMAT	VERSION	PAGE	
	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	16	

#### 2.4 ASSUMPTIONS AND CONSTRAINTS

#### R1: Password

- Password should be a minimum of 8 and a maximum of 16 combinations of alphanumeric characters (SRS\_REQ\_111).
- Default password is staff number (SRS\_REQ\_112).

### R2: Login Attempts

• Number of login attempt cannot exceed 3 (SRS REQ 113).

#### R3: Main supervisor's eligibility

• The main supervisors are lecturers from the Advanced Informatics Department (AID), Razak Faculty of Technology and Informatics (SRS REQ 206).

#### R4: Co-supervisor's eligibility

 The co-supervisors may come from other departments, faculties, or universities/organisations (SRS\_REQ\_207).

### R5: Examiner's eligibility

- The first examiner must be at least an Associate Professor (SRS\_REQ\_410).
- If any of the supervisors or co-supervisors is a Professor, the first examiner must be a Professor (SRS\_REQ\_411).

### R6: Chairperson's eligibility

- The chairperson for each session must be at least an Associate Professor (SRS\_REQ\_514).
- If the supervisor, co-supervisor or any of the examiners is a Professor, the chairperson must be a Professor (SRS\_REQ\_515).
- A chairperson may only chair at most four First Stage Evaluation sessions per semester, per department (SRS\_REQ\_516).

	DOCUMENT IDENTIFICATION				
STARTUP GANG	SYSTEM NAME	FORMAT	VERSION	PAGE	
	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	17	
COMPANY					

### **3 REQUIREMENTS SPECIFICATION**

#### 3.1 CSCI EXTERNAL REQUIREMENTS

The following diagram explains the external interface requirements of EPMS.

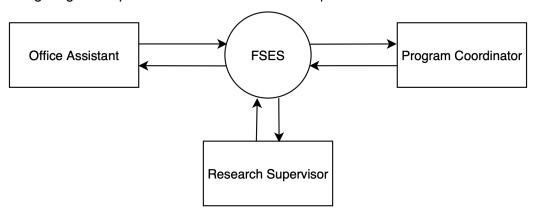


Figure 2: FSES Context Diagram

#### 3.1.1 INTERFACE: OFFICE ASSISTANT

#### 3.1.1.1 IDENTIFICATION

1. Interface Identification: Office Assistant

2. Interface Type: Person

#### 3.1.1.2 DESCRIPTION

The Office Assistant is an actor who is required to prepare student list and manage masterlist.

#### 3.1.1.3 ASSOCIATION

This actor communicates with the Login use case, Prepare student list use case and Manage masterlist use case.

STARTUP GANG	DOCUMENT IDENTIFICATION				
	SYSTEM NAME	FORMAT	VERSION	PAGE	
	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	18	

#### 3.1.2 INTERFACE: RESEARCH SUPERVISOR

#### 3.1.2.1 IDENTIFICATION

1. Interface Identification: Research Supervisor

2. Interface Type: Person

#### 3.1.2.2 DESCRIPTION

The Research Supervisor is an actor who is required to nominate examiners.

#### 3.1.2.3 ASSOCIATION

This actor communicates with the Login use case and Nominate examiners use case.

#### 3.1.3 INTERFACE: PROGRAM COORDINATOR

#### 3.1.3.1 IDENTIFICATION

1. Interface Identification: Program Coordinator

2. Interface Type: Person

#### 3.1.3.2 DESCRIPTION

The Program Coordinator is an actor who is required to assign a chairperson.

#### 3.1.3.3 ASSOCIATION

This actor communicates with the Login use case and Assign chairperson use case.

	DOCUMENT IDENTIFICATION
SG	SYSTEM NAME
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSE

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	19

### **3.2 FSES CAPABILITY REQUIREMENTS**

The following diagram explains the whole use cases for FSES with the three actors mentioned in the subsections above.

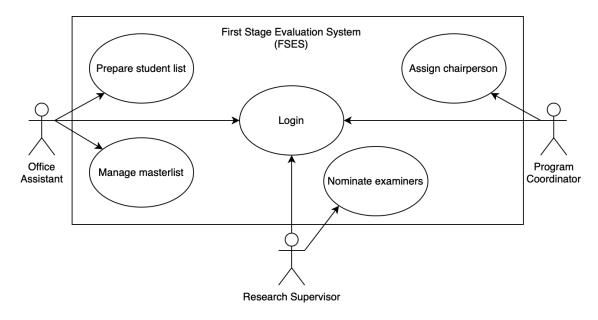


Figure 3: FSES Use Case Diagram

STARTUP GANG	DOCUMENT IDENTIFICATION				
	SYSTEM NAME	FORMAT	VERSION	PAGE	
	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	20	

### 3.2.1 LOGIN USE CASE (SRS\_REQ\_100)

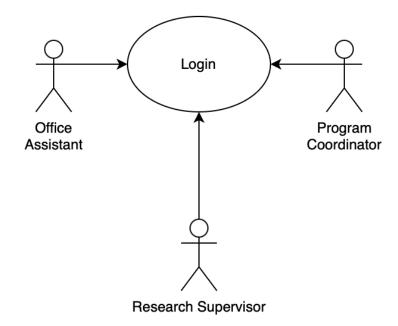


Figure 4: Login Use Case Diagram

#### 3.2.1.1 Brief Description

This use case is initiated by Office Assistant, Research Supervisor and Program Coordinator. It provides Office Assistant, Research Supervisor and Program Coordinator to access FSES.

#### 3.2.1.2 Characteristic of Activation

Upon request from Office Assistant, Research Supervisor and Program Coordinator.

#### 3.2.1.3 Pre-Condition

The FSES is operational and accessible online.

#### 3.2.1.4 Description

#### 3.2.1.4.1 Basic Flow

- 1. This use case begins when the Office Assistant, Research Supervisor and Program Coordinator enters ID & password (SRS\_REQ\_101).
- 2. FSES verifies the ID & password (SRS\_REQ\_102) [R1: Password's Rule]. If ID & password are invalid [E1: Invalid Password].
- 3. FSES checks if it is the first login. If first login [A1: Change Password].

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	21

- 4. FSES displays Dashboard (SRS\_REQ\_103).
- 5. Office Assistant, Research Supervisor and Program Coordinator may reset their passwords [A2: Reset Password].
- 6. This use case ends

#### 3.2.1.4.2 Alternative Flow

#### A1: Change Password

- 1. Office Assistant, Research Supervisor and Program Coordinator enters a new password (SRS\_REQ\_104) [R1: Password's Rule].
- 2. This use case continues.

#### A2: Reset Password

- 1. Office Assistant, Research Supervisor and Program Coordinator requests to reset password (SRS REQ 105).
- 2. FSES sends reset password link to Office Assistant, Research Supervisor and Program Coordinator via email (SRS\_REQ\_106).
- 3. Office Assistant, Research Supervisor and Program Coordinator enters a new password in the link (SRS\_REQ\_107) [R1: Password's Rule].
- 4. This use case continues.

#### 3.2.1.4.3 Exception Flow

#### E1: Invalid Password

- 1. FSES displays "PASSWORD IS INVALID" message (SRS\_REQ\_108).
- 2. Office Assistant, Research Supervisor and Program Coordinator can reattempt login (SRS REQ 109) [R2: Login Attempts].
- 3. If the number of login attempts exceeds 3, FSES locks the ID (SRS\_REQ\_110).
- 4. This use case ends.

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	22

### 3.2.2 PREPARE STUDENT LIST USE CASE (SRS\_REQ\_200)

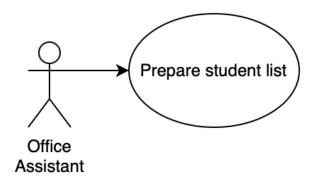


Figure 5: Prepare Student List Use Case Diagram

#### 3.2.2.1 Brief Description

This use case is initiated by Office Assistant. It provides Office Assistant a capability to prepare a student list.

#### 3.2.2.2 Characteristic of Activation

Upon request from the Office Assistant.

#### 3.2.2.3 Pre-Condition

Office Assistant is logged into FSES and the Dashboard is accessible.

#### 3.2.2.4 Description

#### 3.2.2.4.1 Basic Flow

- 1. This use case begins when Office Assistant initiates preparing a student list (SRS\_REQ\_201).
- 2. FSES enters the following details (SRS REQ 202).
  - Student name
  - Program (PhD, MPhil or DSE)
  - Evaluation type (First Evaluation or Re-Evaluation)
  - Student's current semester
  - Main supervisor
  - Co-supervisor
- 3. FSES checks eligibility of Main Supervisor and Co-supervisor (SRS\_REQ\_203) [R3: Main supervisor's eligibility] [R4: Co-supervisor's eligibility].

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	23

- 4. If the Main Supervisor or Co-supervisor is not eligible [E2: Main supervisor is not eligible] [E3: Co-supervisor is not eligible].
- 5. This use case ends.

#### 3.2.2.4.2 Exception Flow

E2: Main supervisor is not eligible

- 1. FSES displays "MAIN SUPERVISOR IS NOT ELIGIBLE" message (SRS\_REQ\_204).
- 2. This use case continues.

E3: Co-supervisor is not eligible

- 1. FSES displays "CO-SUPERVISOR IS NOT ELIGIBLE" message (SRS\_REQ\_205).
- 2. This use case continues.

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	24

### 3.2.3 MANAGE MASTERLIST USE CASE (SRS\_REQ\_300)

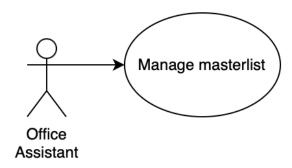


Figure 6: Manage Masterlist Use Case Diagram

#### 3.2.3.1 Brief Description

This use case is initiated by Office Assistant. It provides OA a capability to manage the masterlist of supervisors, examiners and chairpersons.

#### 3.2.3.2 Characteristic of Activation

Upon request from the Office Assistant.

#### 3.2.3.3 Pre-Condition

Office Assistant is logged into FSES and the Dashboard is accessible.

#### 3.2.3.4 Description

#### 3.2.3.4.1 Basic Flow

- This use case begins when Office Assistant initiates managing masterlist. (SRS\_REQ\_301)
- 2. Office Assistant can add, update and remove the list of supervisors, examiners and chairpersons (SRS\_REQ\_302).
- 3. This use case ends.

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	25
COMPANI				

### 3.2.4 NOMINATE EXAMINERS USE CASE (SRS\_REQ\_400)

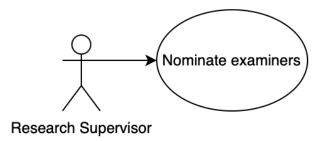


Figure 7: Nominate Examiners Use Case Diagram

#### 3.2.4.1 Brief Description

This use case is initiated by the Research Supervisor. It provides Research Supervisor a capability to nominate examiners for the students under their supervision.

#### 3.2.4.2 Characteristic of Activation

Upon request from the Research Supervisor.

#### 3.2.4.3 Pre-Condition

The Research Supervisor is logged into FSES and the Dashboard is accessible.

#### 3.2.4.4 Description

#### 3.2.4.4.1 Basic Flow

- 1. This use case begins when the Research Supervisor initiates nominating examiners (SRS\_REQ\_401).
- 2. The Research Supervisor enters the student's research title and names three examiners (SRS\_REQ\_402).
- 3. The Research Supervisor may manually nominate examiners from the outside university (SRS REQ 403).
- 4. The Research Supervisor indicates the nomination is completed (SRS REQ 404).
- 5. FSES verifies the nominating examiners (SRS\_REQ\_405) [R5: Examiner's eligibility]. If the nomination is ineligible [E4: Examiner is not eligible].
- 6. The Research Supervisor can perform these alternatives.
  - A3: Modify research title and examiners
  - A4: Postpone student's FSE
  - A5: View list of students under supervision
- 7. This use case ends.

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	26

#### 3.2.4.4.2 Alternative Flow

#### A3: Modify research title and examiners

- 1. Research Supervisor modifies research title and examiners (SRS\_REQ\_406).
- 2. This use case continues.

#### A4: Postpone student's FSE

- 1. Research Supervisor indicates to FSES to postpone student's FSE (SRS\_REQ\_407).
- 2. This use case continues.

#### A5: View list of students under supervision

- 1. FSES displays a list of students under supervision (SRS\_REQ\_408).
- 2. This use case continues.

#### 3.2.4.4.3 Exception Flow

#### E4: Examiner is not eligible

- 1. FSES displays "EXAMINER IS NOT ELIGIBLE" message (SRS\_REQ\_409).
- 2. This use case continues.

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	27

### 3.2.5 ASSIGN CHAIRPERSON USE CASE (SRS\_REQ\_500)

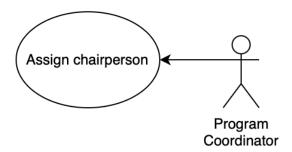


Figure 8: Assign Chairperson Use Case Diagram

#### 3.2.5.1 Brief Description

This use case is initiated by the Program Coordinator. It provides the Program Coordinator a capability to assign chairperson for all sessions.

#### 3.2.5.2 Characteristic of Activation

Upon request from the Program Coordinator.

#### 3.2.5.3 Pre-Condition

Program Coordinator is logged into FSES and the Dashboard is accessible.

#### 3.2.5.4 Description

#### 3.2.5.4.1 Basic Flow

- 1. This use case begins when the Program Coordinator initiates assigning chairperson (SRS REQ 501).
- FSES displays a list of chairperson (SRS\_REQ\_502).
- 3. Program Coordinator requests FSES to assign chairperson automatically (SRS\_REQ\_503).
- 4. Program Coordinator may manually assign or change the chairperson (SRS\_REQ\_504).
- 5. FSES verifies the chairperson's eligibility (SRS\_REQ\_505) [R6: Chairperson's eligibility]. If the chairperson is not eligible [E5: Chairperson is not eligible].
- 6. The Program Coordinator can perform these alternatives.
  - A6: Lock examiners nomination
  - A7: View list of students
  - A8: View list of students and their FSE details by program and evaluation type
  - A9: View list of students postponing their FSE
  - A10: View list of examiners and how many sessions they are examining

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	28

- A11: View list of chairpersons and how many sessions they are chairing
- A12: View graph showing a summary of the FSE details
- 7. This use case ends.

#### 3.2.5.4.2 Alternative Flow

A6: Lock examiners nomination

- 1. Program Coordinator locks examiners nomination (SRS\_REQ\_506).
- 2. This use case continues.

#### A7: View list of students

- 1. FSES displays list of students with the following details (SRS REQ 507).
  - Student name
  - Program (PhD, MPhil or DSE)
  - Evaluation type (First Evaluation or Re-Evaluation)
  - Student's current semester
  - Main supervisor
  - Co-supervisor
  - Research title
  - Examiner 1
  - Examiner 2
  - Examiner 3
- 2. This use case continues.

A8: View list of students and their FSE details by program and evaluation type

- 1. FSES displays list of students and their FSE details by program and evaluation type (SRS\_REQ\_508).
- This use case continues.

A9: View list of students postponing their FSE

- 1. FSES displays a list of students postponing their FSE (SRS\_REQ\_509).
- 2. This use case continues.

A10: View list of examiners and how many sessions they are examining

- 1. FSES displays a list of examiners and how many sessions they are examining (SRS REQ 510).
- 2. This use case continues.

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	29

A11: View list of chairpersons and how many sessions they are chairing

- 1. FSES displays a list of chairpersons and how many sessions they are chairing (SRS\_REQ\_511).
- 2. This use case continues.

A12: View graph showing a summary of the FSE details

- 1. FSES displays a graph showing a summary of the FSE details (SRS\_REQ\_512).
- 2. This use case continues.

### 3.2.5.4.3 Exception Flow

E5: Chairperson is not eligible

- 1. FSES displays "CHAIRPERSON IS NOT ELIGIBLE" message (SRS\_REQ\_513).
- 2. This use case continues.

	DOCUMENT IDENTIFICATION			
SG	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	30

### 3.3 SYSTEM INTERNAL INTERFACE

#### 3.3.1 CSCI DATA ELEMENT REQUIREMENTS

This paragraph identifies the interfaces between the capabilities mentioned above. In this case, it involves providing the main activity, listing the classes, and detailing the received and sent messages of each class from an object-oriented perspective.

#### 3.3.1.1 Boundary Class

### 3.3.1.1.1 LoginPage

I Responsibility	Allows Office Assistant, Research Supervisor and Program Coordinator to log in and have access to the FSES.
Received Events	Office Assistant's, Research Supervisor's and Program Coordinator's ID and password.
Sent Events	Sends the ID and password for authentication.

#### 3.3.1.1.2 ChangePasswordPage

Responsibility	Allows Office Assistant, Research Supervisor and Program Coordinator to change password after the first login.	
Received Events	ved Events Office Assistant's, Research Supervisor's and Program Coordinator's new passwo	
Sent Events	Sends the new password to the Login Controller for validation and password update.	

#### 3.3.1.1.3 DashboardPage

Responsibility	Provides an interface for:  - Office Assistant to view list of students for FSE prepared, navigate to Student Details Page and navigate to Masterlist Page  - Research Supervisors to view list of students for FSE under their supervision and
	navigate to Student Details Page - Program Coordinator to view list of students for FSE with nominated examiners
	and navigate to Student Details Page

	DOCUMENT IDENTIFICATION				
SG	SYSTEM NAME	FORMAT	VERSION	PAGE	
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	31	

Received Events	<ul> <li>Office Assistant's navigation action to Student Details Page</li> <li>Office Assistant's navigation action to Masterlist Page</li> <li>Research Supervisor's navigation action to Student Details Page</li> <li>Program Coordinator's navigation action to Student Details Page</li> </ul>
Sent Events	<ul> <li>Navigate Office Assistant to Student Details Page</li> <li>Navigate Office Assistant to Masterlist Page</li> <li>Navigate Research Supervisor to Student Details Page</li> <li>Navigate Program Coordinator to Student Details Page</li> </ul>

### 3.3.1.1.4 StudentDetailsPage

	Provides an interface for Office Assistant, Research Supervisor and Program
	Coordinator to view the following details for an FSE student:
	- Student name
	- Program (PhD, MPhil or DSE)
	- Evaluation type (First Evaluation or Re-Evaluation)
	- Student's current semester
	- Main supervisor
	- Co-supervisor
	- Research title
	- Examiner 1
	- Examiner 2
	- Examiner 3
	- Chairperson
	·
	Provides an interface for Office Assistant to edit the following details for an FSE
Responsibility	student:
	- Student name
	- Program (PhD, MPhil or DSE)
	- Evaluation type (First Evaluation or Re-Evaluation)
	- Student's current semester
	- Main supervisor
	- Co-supervisor
	Provides an interface for Research Supervisor to edit the following details for an
	FSE student:
	- Research title
	- Examiner 1
	- Examiner 2
	- Examiner 3
	Provides an interface for Program Coordinator to edit the following details for an

	DOCUM
SG	SYSTE
STARTUP GANG	FISRT S

DOCUMENT IDENTIFICATION				
SYSTEM NAME	FORMAT	VERSION	PAGE	
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	32	

	FSE student: - Chairperson
Received Events	- Student name - Program (PhD, MPhil or DSE) - Evaluation type (First Evaluation or Re-Evaluation) - Student's current semester - Main supervisor - Co-supervisor - Research title - Examiner 1 - Examiner 2 - Examiner 3 - Chairperson
Sent Events	<ul> <li>Sends all details to the Student Controller</li> <li>Sends Main Supervisor and Co-supervisor to the Supervisor Controller for validation</li> <li>Sends Examiner 1, Examiner 2 and Examiner 3 to the Examiner Controller for validation</li> <li>Sends Chairperson to the Chairperson Controller for validation</li> </ul>

### 3.3.1.1.5 MasterlistPage

Responsibility	Provides an interface for Office Assistant to: - View list of supervisors, examiners & chairpersons - Add, remove and update supervisors, examiners & chairpersons
Received Events	<ul> <li>Office Assistant's add supervisor, examiners &amp; chairpersons action</li> <li>Office Assistant's remove supervisor, examiners &amp; chairpersons action</li> <li>Office Assistant's update supervisor, examiners &amp; chairpersons action</li> </ul>
Sent Events  Sends the name of the supervisor, examiners & chairpersons to the Eligibility Controller for validation.	

#### 3.3.1.2 Control Class

### 3.3.1.2.1 UserRoutes

Responsibility	Responsible for validating ID and password used to login FSES and for validating login attempts.
----------------	--

	DOCUMENT IDENTIFICATION				
SG	SYSTEM NAME	FORMAT	VERSION	PAGE	
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	33	

Received Events	Office Assistant's, Research Supervisor's and Program Coordinator's ID and password.
Sent Events	Verify Office Assistant's, Research Supervisor's and Program Coordinator's ID and password with the User Database.

#### 3.3.1.2.2 EvaluationRoutes

Responsibility	Responsible for validating the following eligibility: - Supervisor - Examiner - Chairperson
Received Events	<ul><li>Supervisor</li><li>Examiner</li><li>Chairperson</li></ul>
Sent Events	Verify eligibility with the Lecturer Database.

### 3.3.1.3 Entity Class

#### 3.3.1.3.1 UserDB

I Resnonsinility	Stores and manages Office Assistant's, Research Supervisor's and Program Coordinator's ID, password and role.
I Received Events	Receives request to validate Office Assistant's, Research Supervisor's and Program Coordinator's ID and password.
Sent Events	Sends validation results back.

#### 3.3.1.3.2 EvaluationDB

Responsibility Stores and manages student details for FSE.	
Received Events	Student details to be stored in the database.
Sent Events	Sends the student details back to the FSES.

\$G	DOCUMENT IDENTIFICATION			
	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	34

### **3.4 OTHER REQUIREMENTS**

#### 3.4.1 RELIABILITY

The FSES system shall be able to access anywhere and anytime.

#### 3.4.2 MAINTAINABILITY

The FSES downtime shall not exceed 6 hours (optional).

#### 3.4.3 PERFORMANCE

The FSES shall support multiple access from several lecturers and the Office Assistant.

#### 3.4.4 SECURITY

Access to operate the functions available to the actors will be restricted by using the correct password.

#### 3.4.5 CAPACITY

Initially, the system shall cater to programs belonging to Advanced Informatics Department.

#### 3.4.6 EXPANDABILITY

Not applicable.

	DOCUMENT IDENTIFICATION				
SG	SYSTEM NAME	FORMAT	VERSION	PAGE	
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	35	

### **3.4.7 TRACEABILITY REQUIREMENTS**

Table 2 below presents the requirement traceability matrix.

**Table 2:Traceability Matrix** 

No.	Source	Requirement	ID Description	Section
	<u> </u>		Login Use Case (SRS_REQ_100)	
1	URS	SRS_REQ_101	The Office Assistant, Research Supervisor and Program Coordinator enters ID & password.	3.2.1.4.1
2	URS	SRS_REQ_102	FSES verifies the ID & password.	3.2.1.4.1
3	URS	SRS_REQ_103	FSES displays Dashboard.	3.2.1.4.1
4	URS	SRS_REQ_104	FSES checks if it is the first login. If first login, Office Assistant, Research Supervisor and Program Coordinator enters a new password.	3.2.1.4.2
5	URS	SRS_REQ_105	Office Assistant, Research Supervisor and Program Coordinator requests to reset password.	3.2.1.4.2
6	URS	SRS_REQ_106	FSES sends reset password link to Office Assistant, Research Supervisor and Program Coordinator via email.	3.2.1.4.2
7	URS	SRS_REQ_107	Office Assistant, Research Supervisor and Program Coordinator enters a new password in the link.	3.2.1.4.2
8	URS	SRS_REQ_108	If ID & password are invalid, FSES displays "PASSWORD IS INVALID" message.	3.2.1.4.3
9	URS	SRS_REQ_109	Office Assistant, Research Supervisor and Program Coordinator can reattempt login.	3.2.1.4.3
10	URS	SRS_REQ_110	If the number of login attempts exceeds 3, FSES locks the ID.	3.2.1.4.3
11	URS	SRS_REQ_111	Password should be a minimum of 8 and a maximum of 16 combinations of alphanumeric characters.	2.4
12	URS	SRS_REQ_112	Default password is staff number.	2.4
13	URS	SRS_REQ_113	Number of login attempt cannot exceed 3.	2.4
		Prep	are Student List Use Case (SRS_REQ_200)	
14	URS	SRS_REQ_201	Office Assistant initiates preparing a student list.	3.2.2.4.1
15	URS	SRS_REQ_202	FSES enters the following details: - Student name - Program (PhD, MPhil or DSE) - Evaluation type (First Evaluation or Re-Evaluation) - Student's current semester - Main supervisor	3.2.2.4.1

SYSTEM N.	AME
STARTUP GANG	GE E\

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	36

			- Co-supervisor	
16	URS	SRS_REQ_203	FSES checks eligibility of Main Supervisor and Co-supervisor.	3.2.2.4.1
17	URS	SRS_REQ_204	If the Main Supervisor is not eligible, FSES displays "MAIN SUPERVISOR IS NOT ELIGIBLE" message.	3.2.2.4.2
18	URS	SRS_REQ_205	If the Co-supervisor is not eligible, FSES displays "CO-SUPERVISOR IS NOT ELIGIBLE" message.	3.2.2.4.2
19	URS	SRS_REQ_206	The main supervisors are lecturers from the Advanced Informatics Department (AID), Razak Faculty of Technology and Informatics.	2.4
20	URS	SRS_REQ_207	The co-supervisors may come from other departments, faculties, or universities/organisations.	2.4
		Mar	nage Masterlist Use Case (SRS_REQ_300)	
21	URS	SRS_REQ_301	Office Assistant initiates managing masterlist.	3.2.3.4.1
22	URS	SRS_REQ_302	Office Assistant can add, update and remove the list of supervisors, examiners and chairpersons.	3.2.3.4.1
Nominate Examiners Use Case (SRS_REQ_400)				
23	URS	SRS_REQ_401	Research Supervisor initiates nominating examiners.	3.2.4.4.1
24	URS	SRS_REQ_402	Research Supervisor enters the student's research title and names three examiners.	3.2.4.4.1
25	URS	SRS_REQ_403	Research Supervisor may manually nominate examiners from the outside university.	3.2.4.4.1
26	URS	SRS_REQ_404	Research Supervisor indicates the nomination is completed.	3.2.4.4.1
27	URS	SRS_REQ_405	FSES verifies the nominating examiners.	3.2.4.4.1
28	URS	SRS_REQ_406	Research Supervisor modifies research title and examiners.	3.2.4.4.2
29	URS	SRS_REQ_407	Research Supervisor indicates to FSES to postpone student's FSE.	3.2.4.4.2
30	URS	SRS_REQ_408	FSES displays a list of students under supervision.	3.2.4.4.2
31	URS	SRS_REQ_409	If the nomination is ineligible, FSES displays "EXAMINER IS NOT ELIGIBLE" message.	3.2.4.4.2
32	URS	SRS_REQ_410	The first examiner must be at least an Associate Professor.	2.4
33	URS	SRS_REQ_411	If any of the supervisors or co-supervisors is a Professor, the first examiner must be a Professor.	2.4
			Assign Chairperson (SRS_REQ_500)	
34	URS	SRS_REQ_501	Program Coordinator initiates assigning chairperson.	3.2.5.4.1

STARTUP GANG
COMPANY

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	37

35	URS	SRS_REQ_502	FSES displays a list of chairperson.	3.2.5.4.1
36	URS	SRS_REQ_503	Program Coordinator requests FSES to assign chairperson automatically.	3.2.5.4.1
37	URS	SRS_REQ_504	Program Coordinator may manually assign or change the hairperson.	
38	URS	SRS_REQ_505	FSES verifies the chairperson's eligibility.	3.2.5.4.1
39	URS	SRS_REQ_506	Program Coordinator locks examiners nomination.	3.2.5.4.2
40	URS	SRS_REQ_507	FSES displays list of students with the following details: - Student name - Program (PhD, MPhil or DSE) - Evaluation type (First Evaluation or Re-Evaluation) - Student's current semester - Main supervisor - Co-supervisor - Research title - Examiner 1 - Examiner 2 - Examiner 3	3.2.5.4.2
41	URS	SRS_REQ_508	FSES displays list of students and their FSE details by program and evaluation type.	3.2.5.4.2
42	URS	SRS_REQ_509	FSES displays a list of students postponing their FSE.	3.2.5.4.2
43	URS	SRS_REQ_510	FSES displays a list of examiners and how many sessions they are examining.	3.2.5.4.2
44	URS	SRS_REQ_511	FSES displays a list of chairpersons and how many sessions they are chairing.	3.2.5.4.2
45	URS	SRS_REQ_512	FSES displays a graph showing a summary of the FSE details.	3.2.5.4.2
46	URS	SRS_REQ_513	If the chairperson is not eligible, FSES displays "CHAIRPERSON IS NOT ELIGIBLE" message.	3.2.5.4.3
47	URS	SRS_REQ_514	The chairperson for each session must be at least an Associate Professor.	2.4
48	URS	SRS_REQ_515	If the supervisor, co-supervisor or any of the examiners is a Professor, the chairperson must be a Professor.	2.4
49	URS	SRS_REQ_516	A chairperson may only chair at most four First Stage Evaluation sessions per semester, per department.	2.4

SG	DOCUMENT IDENTIFICATION			
	SYSTEM NAME	FORMAT	VERSION	PAGE
STARTUP GANG	FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	38

### 3.4.8 DESIGN CONSTRAINTS

Object-oriented development (OOD) techniques with UML notation shall be applied to the project.

STARTUP GANG
COMPANY

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	39

### **APPENDICE**

#### Basic Flow - Login

- This use case begins when the Office Assistant, Research Supervisor and Program Coordinator enters ID & password (SDD. REQ. 101).
   FSES verifies the ID & password (SDD. REQ. 102) [R1: Password's Rule]. If ID & password are invalid [E1: Invalid Password].
   FSES checks if it is the first login. If first login [A1: Change Password].
   FSES displays Dashboard (SDD. REQ. 103).
   Office Assistant, Research Supervisor and Program Coordinator may reset their passwords [A2: Reset Password].

- Passwordl.
- 6. This use case ends

- Alternative Flow
  A1: Change Password
  1. Office Assistant, Research Supervisor and Program Coordinator enters a new password
  (SDD\_REQ\_104) [R1: Password's Rule].
  2. This use case continues.
  A2: Reset Password
  1. Office Assistant, Research Supervisor and Program Coordinator requests to reset password

- Coordinator requests to reset password (SDD\_REQ\_105).
- FSES sends reset password link to Office Assistant, Research Supervisor and Program Coordinator via
- Research Supervisor and Program Coordinator via email (SDD, REQ\_106).

  3. Office Assistant, Research Supervisor and Program Coordinator enters a new password in the link (SDD, REQ\_107) [Rt: Password's Rule].

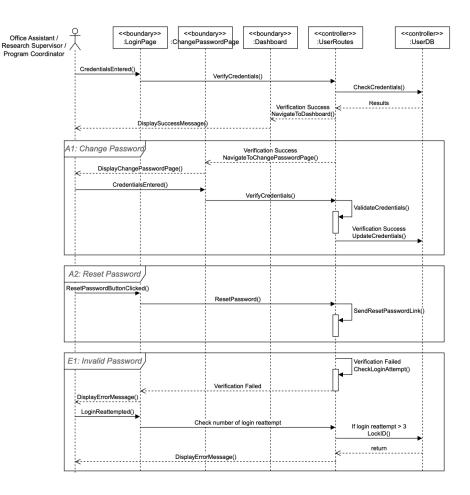
  4. This use case continues.

- Exception Flow
  E1: Invalid Password
  1. FSES displays "PASSWORD IS INVALID" message (SDD\_REQ\_108).

  2. Office Assistant, Research Supervisor and Program
  - 2. Office Assistant, Research Supervisor and Program Coordinator can reattempt login (SDD\_REQ\_109) [R2: Login Attempts].

    3. If the number of login attempts exceeds 3, FSES locks the ID (SDD\_REQ\_110).

    4. This use case ends.





DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	40

#### **Basic Flow - Prepare Student List**

- 1. This use case begins when Office Assistant initiates preparing a student list (SDD\_REQ\_201).
- 2. FSES enters the following details (SDD\_REQ\_202).
  - Student name
  - Program (PhD, MPhil or DSE)
  - Evaluation type (First Evaluation or Re-Evaluation)
  - · Student's current semester
  - Main supervisor
  - Co-supervisor
- FSES checks eligibility of Main Supervisor and Cosupervisor (SDD\_REQ\_203) [R3: Main supervisor's eligibility] [R4: Co-supervisor's eligibility].
- If the Main Supervisor or Co-supervisor is not eligible [E2: Main supervisor is not eligible] [E3: Co-supervisor is not eligible].
- 5. This use case ends.

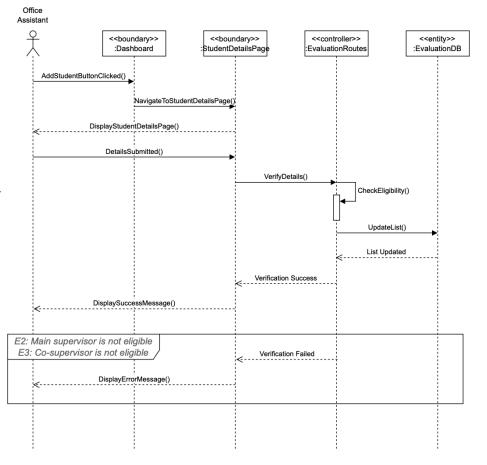
#### **Exception Flow**

#### E2: Main supervisor is not eligible

- 1. FSES displays "MAIN SUPERVISOR IS NOT ELIGIBLE" message (SDD\_REQ\_204).
- 2. This use case continues.

#### E3: Co-supervisor is not eligible

- FSES displays "CO-SUPERVISOR IS NOT ELIGIBLE" message (SDD\_REQ\_205).
- 2. This use case continues.

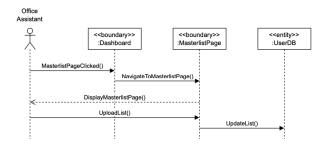




DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	41

#### Basic Flow - Manage Masterlist

- 1. This use case begins when Office Assistant initiates managing masterlist. (SDD\_REQ\_301)
  2. Office Assistant can add, update and remove the list of supervisors, examiners and chairpersons (SDD\_REQ\_302).
- 3. This use case ends.



20
<b>5</b> (7)
STARTUP GANG

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	42

#### **Basic Flow - Nominate Examiners**

- This use case begins when the Research Supervisor initiates nominating examiners (SDD\_REQ\_401).
- The Research Supervisor enters the student's research title and names three examiners (SDD\_REQ\_402).
- The Research Supervisor may manually nominate examiners from the outside university (SDD\_REQ\_403).
- 4. The Research Supervisor indicates the nomination is completed (SDD\_REQ\_404).
- FSES verifies the nominating examiners (SDD\_REQ\_405) [R5: Examiner's eligibility]. If the nomination is ineligible [E4: Examiner is not eligible].
- 6. The Research Supervisor can perform these alternatives.
  - · A3: Modify research title and examiners
  - A4: Postpone student's FSE
- A5: View list of students under supervision
- 7. This use case ends.

#### **Alternative Flow**

#### A3: Modify research title and examiners

- Research Supervisor modifies research title and examiners (SDD\_REQ\_406).
- 2. This use case continues.

#### A4: Postpone student's FSE

- Research Supervisor indicates to FSES to postpone student's FSE (SDD\_REQ\_407).
- 2. This use case continues.

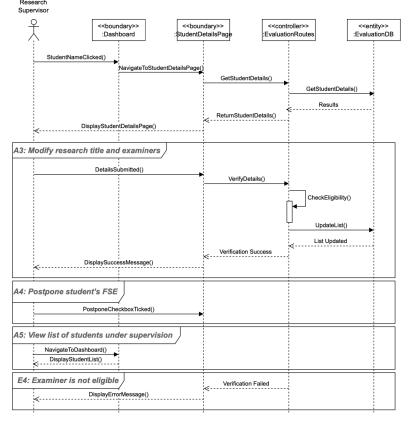
#### A5: View list of students under supervision

- 1. FSES displays a list of students under supervision (SDD\_REQ\_408).
- 2. This use case continues.

#### Exception Flow

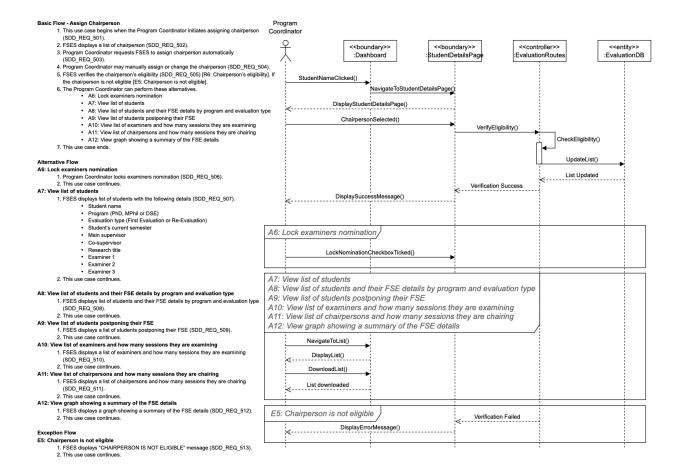
#### E4: Examiner is not eligible

- FSES displays "EXAMINER IS NOT ELIGIBLE" message
   (SDD\_REQ\_409).
- 2. This use case continues.





DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	43



36
347
STARTUP GANG

DOCUMENT IDENTIFICATION			
SYSTEM NAME	FORMAT	VERSION	PAGE
FISRT STAGE EVALUATION SYSTEM (FSES)	A4	2.0	44