

Software Engineering

**Advance Management,**

Accounts Module

**Software**

**Requirements**

**Specification (SRS)**

---

Team Name: **Rule The World**

**Members:**

Kumar Pradumn (B18CSE024)

Muskan Bathla (B18CSE036)

Nivedit Jain (B18CSE039)

Nagamalla Rohith (B18CSE065)

# SRS Change Log

Date	Change	Comments
25th Feb 2020	Completed initial document	

## Table of Contents

<b>Introduction</b>	<b>3</b>
<b>Use-Case Diagram</b>	<b>4</b>
<b>Use-Case Login</b>	<b>5</b>
<b>Use-Case Request Advance</b>	<b>8</b>
<b>Use-Case Request Receipt Processing</b>	<b>11</b>
<b>Use-Case Settle Advance</b>	<b>13</b>
<b>Use-Case Approve Request</b>	<b>16</b>
<b>Non Functional Requirements</b>	<b>19</b>
<b>Appendix 1</b>	<b>20</b>
<b>Appendix 2</b>	<b>22</b>

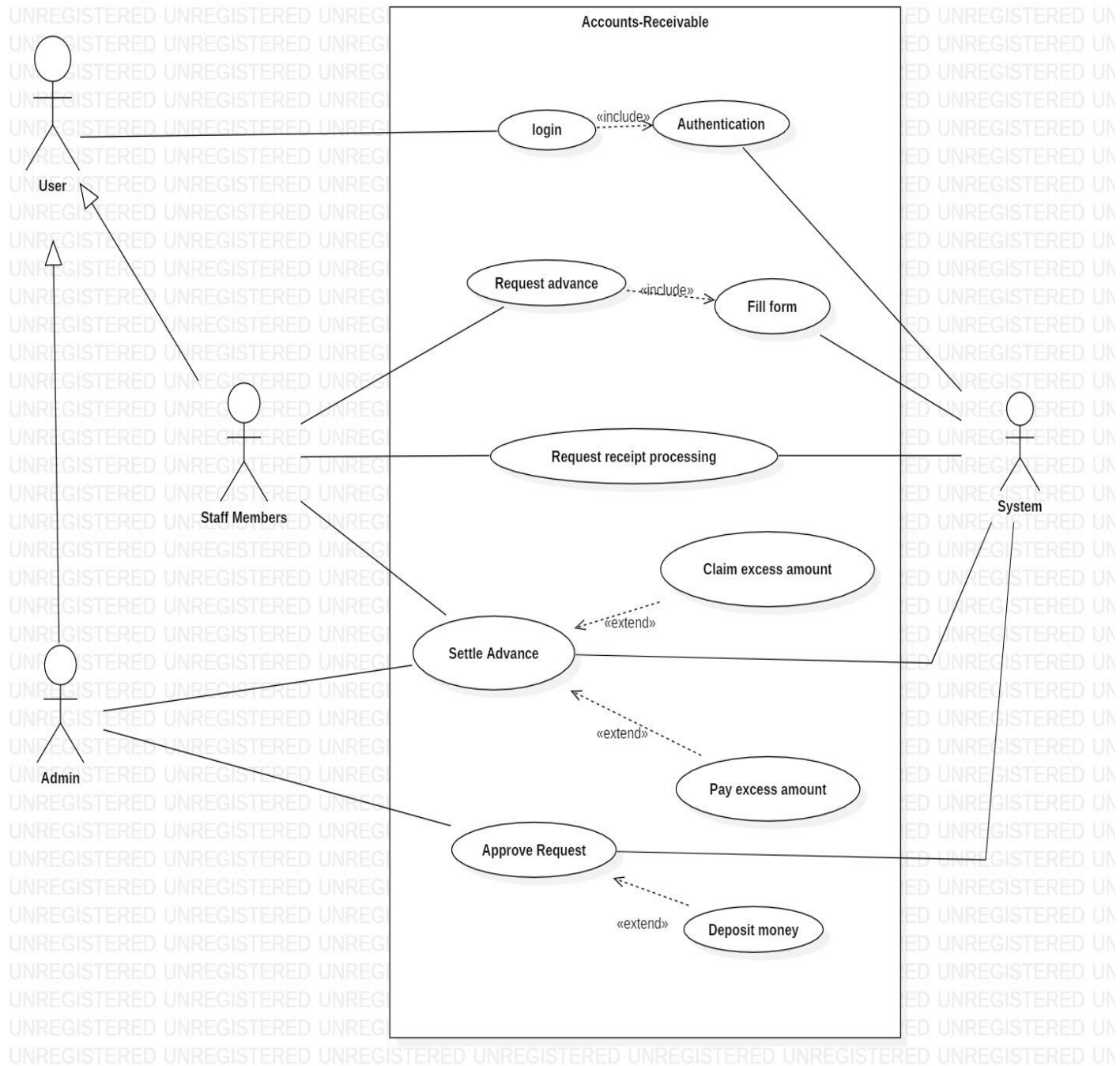
## Introduction

We aim to develop a website where a user (faculty/staff of IIT Jodhpur) can deal with all the issues related to advance and its processing from the accounts department of Indian Institute of Technology Jodhpur.

Client (Accounts Department IITJ) does not have any such existing facilities and all the work is done manually which is slow, cumbersome and tiring.

We expect that a large number of staff, faculty and people from the office of accounts of Indian Institute of Technology will be benefited from this service.

# Use-Case Diagram



# Use Case - Login

## Description

User logs into the system with his username and password which is to be verified by the system through the database and depending on whether he/she is admin/staff member home page opens.

## Actors

Admin, Staff, System

## Priority

1 (Highest)

## Status

Proposed

## Pre-Condition

Should be a Staff of IIT Jodhpur or should have an admin excess.

## Post-Condition

Home Page Opens after successful authentication

## Extension Points

Nil

## Flow of Events

1. The user enters email and systems verify email
2. The user enters the password and the system verifies the details.
3. Email and password combination is verified by the system database.
4. If the password and email are verified then go to the home page.

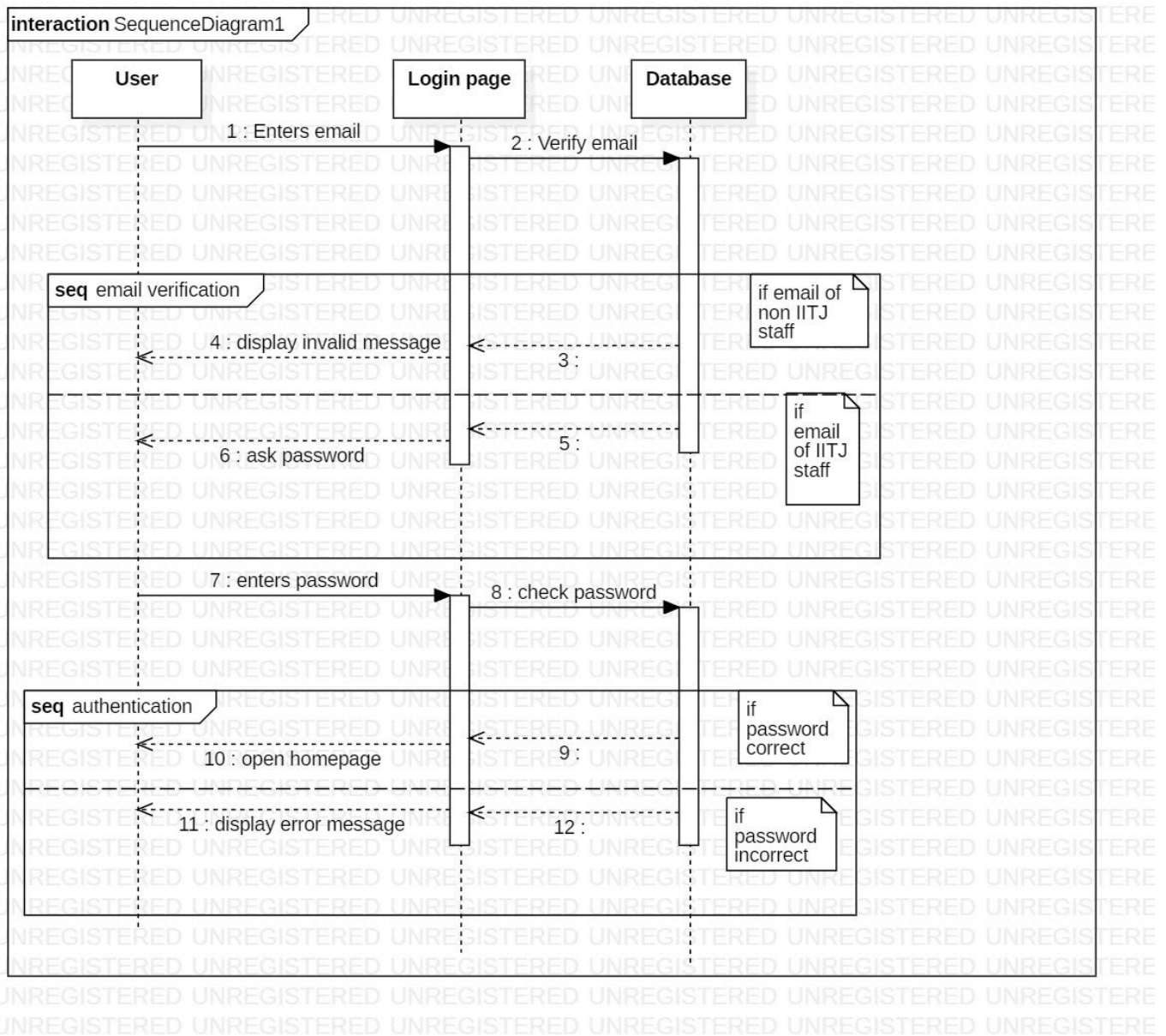
## Alternate Flow

1. **Non-IITJ staff email** Display message “this service is only for IITJodhpur Staff”.
2. **Wrong Password**
  - a. Display message “wrong email password combination”
  - b. Reopen Login Page

## Exception

Network issues

## Sequence Diagram





# Use Case - Request Advance

## Description

Staff Members requests for the advance and for that he/she has to fill the advance request form which will be forwarded to the admin for further approval.

## Actors

Staff, System

## Priority

2 (High)

## Status

Proposed

## Pre-Condition

Authentication and verification of previous advances.

## Post-Condition

The request goes to the admin via the system.

## Extension Points

Nil

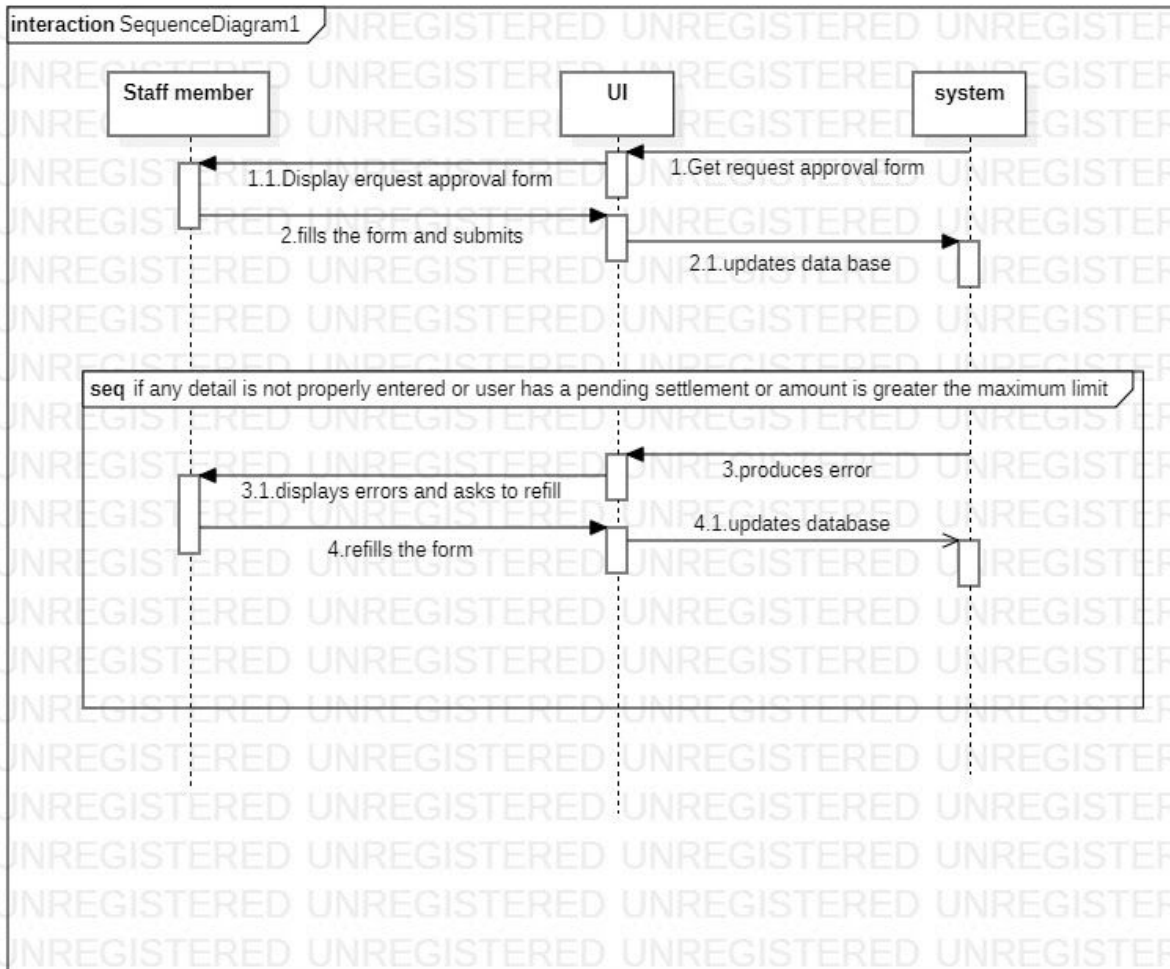
## Flow of Events

1. The advance request form is displayed on the screen.
2. Staff fills the form
3. The form is forwarded to the admin via the system.

### **Alternate Flow**

1. If any detail has not properly entered the display the message before submitting it.
2. If a user has a pending settlement he cannot fill the form.
3. Amount requested must be less than the maximum allowed.

## Sequence Diagram



# Use Case - Request Receipt Processing

## Description

Staff members can take a receipt for the requests/transactions which they did.

## Actors

Staff, System

## Priority

4 (low)

## Status

Proposed

## Pre-Condition

Some requests/transactions are made and successful login

## Post-Condition

Printed Receipt

## Extension Points

Open Printer Tab

## Flow of Events

1. Display a history of advances requested/settled.
2. Print the selected receipt

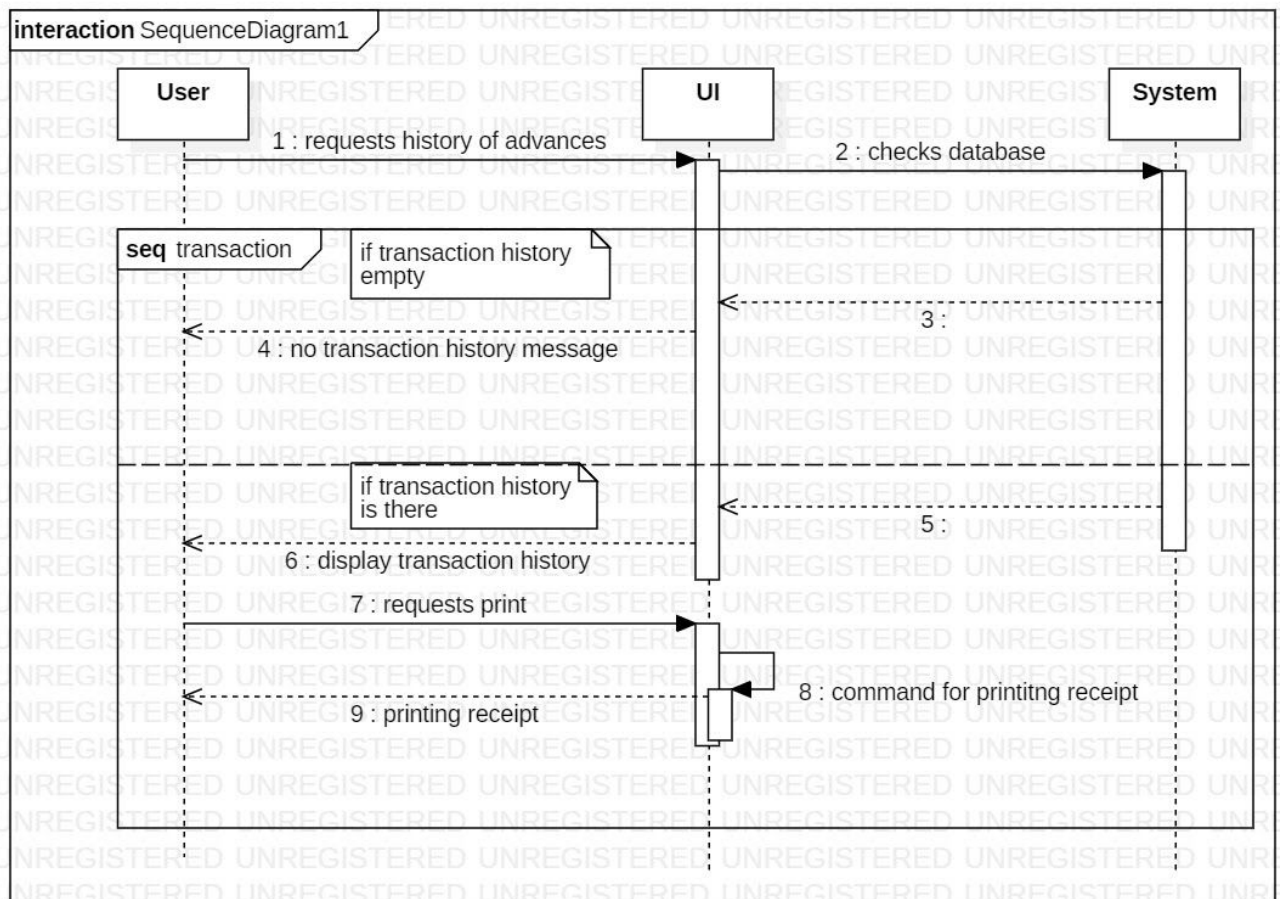
## Alternate Flow

1. No transaction to display

## Exception

The printer is not working

## Sequence Diagram



■ ■ ■

# Use Case - Settle Advance

## Description

Staff members are needed to fill in advance settlement form which includes the extra expenses claimed/budget deposited.

## Actors

Admin, Staff, System

## Priority

2 (high)

## Status

Proposed

## Pre-Condition

Advance approval and completion of transactions related to advance requests are mandatory.

## Post-Condition

Completion of the respective transaction through bank

## Extension Points

Bank Server not available

## Flow of Events

1. Settle advance form to be filled.
2. Attach necessary bills.
3. Forward request to authorities.

### **Alternate Flow**

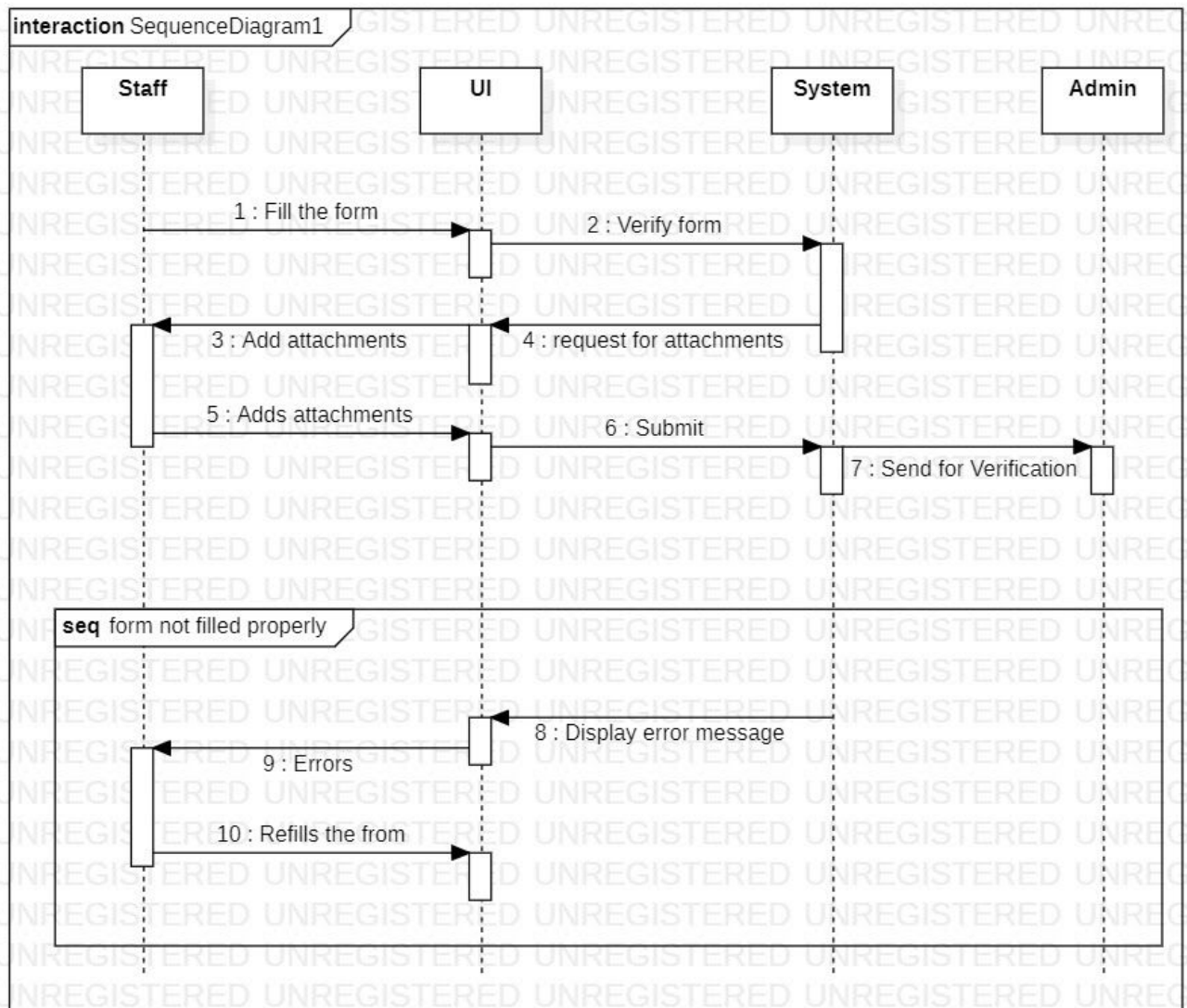
1. If any field is not properly filled then ask for it before submission and submit only complete forms.

### **Exception**

Nil



## Sequence Diagram



# Use Case - Approve Request

## Description

Admin approves the advance request made by the staff members depending on some crucial factors which include the reason for the advance and validity of the amount requested.

## Actors

Admin

## Priority

2 (high)

## Status

Proposed

## Pre-Condition

Advance Request and Admin Login

## Post-Condition

Money gets transferred/request gets rejected.

## Extension Points

Nil

## Flow of Events

1. Checks the kind of request.

- a. If the request is the advance request form
  - i. After verifying the form of the applicant the admin decides whether to approve it or not.
  - ii. If all the required conditions are satisfied, it gets approved then the request is sent to the bank
  - iii. Necessary notification is sent to the applicant
- b. If the request is settled the advance form
  - i. Admin verifies the form and attaches receipts
  - ii. If expenses > advance then the excess amount is transferred to the staff member's account.
  - iii. If self expenses < advance then the staff member is notified to pay the remaining amount within 15 days.
  - iv. else advance settlement successfully executed.

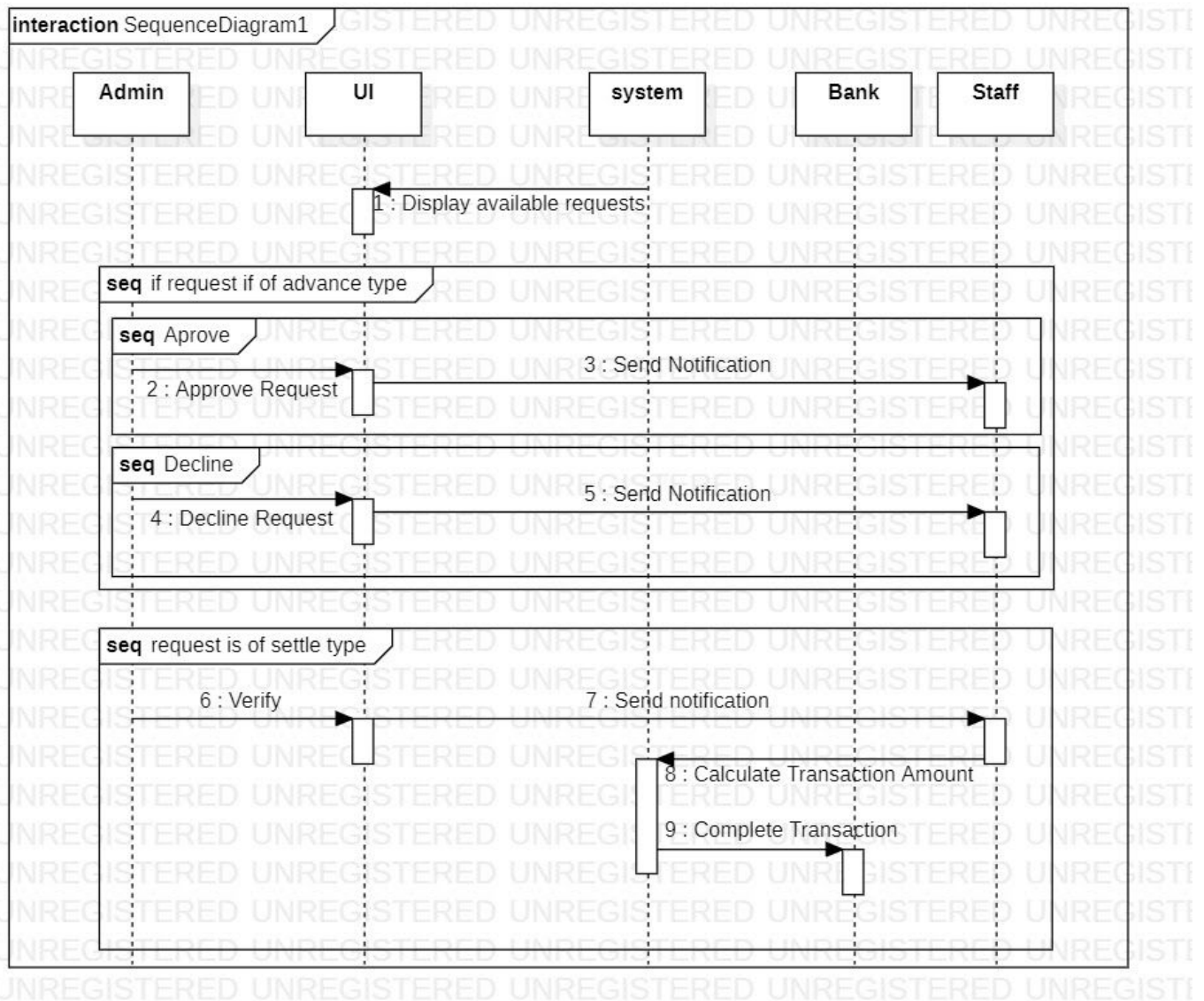
### Alternate Flow

Nil

### Exception

Nil

## Sequence Diagram



# Non Functional Requirements

1. Office has clearly mentioned that transaction amounts can go upto 1.5 Crore INR and want a banking support system which can handle such large amounts.
2. As payments are involved on the portal, office also wants to keep a tight network security against all sorts of possible cyber attacks.
3. Office also wants the UI to be very simple and easy especially for form filling and uploads.
4. Portal must also have a quick response time and must only work on intranet and institute issued VPNs.
5. As in future this app would not be maintained by the same team its code must be easily readable and editable with high modularity.
6. A good documentation and descriptive comments in code is also desired.
7. An easily mobile responsive UI is also desired.
8. A backup of data each day is also requested by client.

# Appendix 1

From A1, presently used form for Temporary Advance Request.



Indian Institute of Technology Jodhpur

Office of Accounts

**Form No. A1**

Page: 1 of 2

## Temporary Advance Request

To be submitted to Office of Accounts at least 3 working days before the requirement of Advance

S. No.	Content	Details
1.	Name of the Applicant	
2.	Designation	
3.	Personal File Number	
4.	Purpose of the Advance	
5.	Advance Required from	1. Institute Budget <input type="checkbox"/> 2. Department Budget <input type="checkbox"/> 3. Other (Please Specify) <input type="checkbox"/>
6.	Head of Expenditure	1. Contingency <input type="checkbox"/> 2. Consumable <input type="checkbox"/> 3. Non Consumable <input type="checkbox"/> 4. CPDA <input type="checkbox"/> 5. Other <input type="checkbox"/>
7.	Amount of Advance	
8.	Financial Sanction No.	
9.	Budget Available	
10.	Bank details for Fund Transfer	
	1. Name of Account Holder	
	2. Account No.	
	3. Bank Name and Branch	
	4. IFSC Code	
11.	Declaration	
	1. The Advance is required to facilitate an activity or event in which various petty expenditures are involved and they are required to be paid in cash. 2. I declare that the amount of advance will be used for Institute work only. 3. I will settle the Advance within 15 Days.	
Date :		
		Signature of Employee
Approved/Not Approved		
		Signature of Head/Director

### For use of Office of Accounts only

1.	Any previous Advance pending (Tick one)	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.	Amount Advanced	Rs.
Dealing Assistant (Accounts)		Officer-in-Charge (Accounts)



S. No.	Content	Details
1.	Name of the Applicant	
2.	Amount of Advance	
3.	Details	Amount (Rs.)
	Total:	

Date :
Signature of Employee

# Appendix 2

From A2, presently used form for Settlement of Temporary Advance.



Indian Institute of Technology Jodhpur  
Office of Accounts  
**Form No A2**

## Settlement of Temporary Advance

S. No	Content	Details
1.	Name of the Applicant	
2.	Designation	
3.	Personal File No.	
4.	Head of Expenditure	(1) Contingency <input type="checkbox"/> (2) Consumable <input type="checkbox"/> (3) Non-Cosumable <input type="checkbox"/> (4) CPDA <input type="checkbox"/> (5) Other <input type="checkbox"/>
5.	Purpose of Advance Taken	
6.	Financial Sanction No.	Available Budget
7.	Amount of advance	Date of advance taken: Advance Rs.
8.	Excess amount claimed / Balance deposited: (+/-)	Rs. <b>Total Expenditure Rs.</b> Rs.

S.No.	Date	Cash Memo/ Receipt No.	Supplier's Name	Particulars	Amount Rs.	Stock Register & Page No.
1						
2						
3						
4						
Total						

I hereby certify that the:

- Cash purchases were made for the items that were needed urgently and were not available in stores at the Institute.
- Goods purchased were inspected before acceptance.
- Prices paid are the cheapest.
- Items purchased are entered in the appropriate Stock Register.
- I am personally satisfied that these goods purchased are of the requisite specification and quality, and have been purchased from reliable supplier at a reasonable price.

Date: Signature of Employee

Approval accorded/not accorded

Signature of Head/Director

### For Office of Accounts Use Only

S No	Content	Details
1	Advance Drawn	Rs.
2	Expenditure made	Rs.
3	Excess Amount Claimed	Rs.
4	Balance Deposited in A/S	Rs.
5	Book No. & Date	

Dealing Assistant (Accounts)	Audit Officer	Officer-In-Charge (Accounts)
------------------------------	---------------	------------------------------