**Assignment 1 Cover Sheet**

**IT1060 – Software Process Modeling**                    **Semester 2 Year 01**
**Semester II- 2024**

| PROJECT ID | MLB_04.02_08 |
|---|---|
| CASE STUDY NAME | Life Insurance Management System |
| CAMPUS/CENTER | Malabe Centre |

**Group Details:**

| | Student Registration Number | Student Name |
|---|---|---|
| 1 | IT23228276 | Aaqib A.R. |
| 2 | IT23223530 | Thakkif Ahamed I.M. |
| 3 | IT23220942 | Thanis Ahamed A.R. |
| 4 | IT23222236 | Erathnage T.N. |
| 5 | IT23222786 | Budara V.P.R. |

# Assignment 1

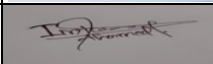**IT1060 – Software Process Modeling**                    **Semester 2** **Year 01**
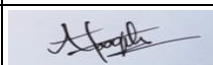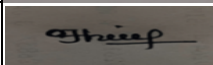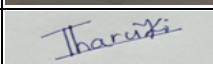
**Semester II**- **2024**

Certify Sheet

We hereby certify,

☑    The attached is our own work and no further changes will be made.

☑     We have contributed in this assignment to the best of our ability.
And we understand,

☑    We may be subject to student discipline processes in the event of an act of academic misconduct by us including an act of plagiarism or cheating.

## Group Details:

| | Student Name | Student Registration Number | Date | Signature |
|---|---|---|---|---|
| 1 | Aaqib A.R. | IT23228276 | 20/03/2024 | |
| 2 | Thakkif Ahamed I.M. | IT23223530 | 20/03/2024 | |
| 3 | Thanis Ahamed A.R. | IT23220942 | 20/03/2024 | |
| 4 | Erathnage T.N. | IT23222236 | 20/03/2024 | |
| 5 | Budara V.P.R. | IT23222786 | 20/03/2024 | |

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**Assignment** 1

**IT1060 – Software Process Modeling**                    **Semester 1 Year 01**
**Semester II- 2022**

# Life Insurance Management System

# Introduction

Welcome to the Life Insurance Management System, your go-to platform for efficiently managing your life insurance policies! Whether you're safeguarding your family's future or planning for retirement, our system offers tailored tools and resources to meet your insurance needs. With easy-to-use interfaces and dedicated support, we aim to simplify the management of your life insurance portfolio, ensuring peace of mind for you and your loved ones.

Our platform welcomes all users with a basic free plan and provides the option for a premium subscription. Premium subscribers gain access to advanced features like policy analysis, premium tracking, and personalized recommendations. Organize your policies seamlessly, track premiums effortlessly, and stay up to date with the latest insurance trends and updates through our intuitive platform.

In this report, we'll present a use case study of the Life Insurance Management System, diving into its background, objectives, and the methods used for analysis. We will explain the background and objectives of the project, the methods, and tools we used to conduct the use case study, and the results and findings of the analysis. We will also provide an analysis of how the users interact with the system.
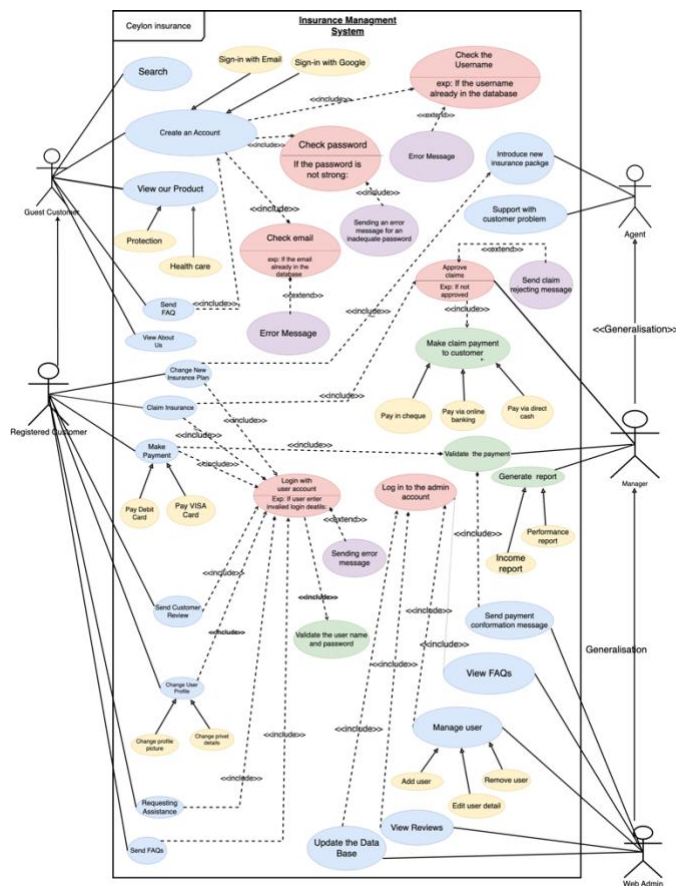
USECASE

**Assignment 1**

**IT1060 – Software Process Modeling**                     **Semester 1 Year 01**
**Semester II- 2022**

# IT23228276-Aaqib A.R.

## a) Individual Contribution

- Created use case diagram for **Guest customer** and **bank**.
- Worked on creating use case scenarios for,
    1. Viewing the Products
    2. Managing Payments

## b) Special Contribution

- Corrected the grammatical mistakes.
- Formatted the document well.

## c) . Encountered Challenges

- Not enough time due to midterm exams.
- Insufficient understanding of the assignment requirements.
- Lack of knowledge about managing life insurance.
- Difficulty in coordinating group members for the use-case diagram.
- Difficulty in identifying the "include" & "extended" relationships correctly.

Despite the challenges, we completed the assignment on time.

| Number | IT23228276 |
|---|---|
| Use Case ID | UC001 |
| Use Case Name | Viewing the Products |
| Summary | Guest customers can only view products and cannot purchase or navigate further until he/she registers themselves to it. |
| Priority | 3 |
| Pre-condition | The guest customer is not registered to the system |
| Post-condition | The guest's information is stored into the system. The guest customer is registered in the system. |
| Primary actor | Guest Customer |
| Trigger | A guest customer should register themselves as a registered customer to purchase any product. |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | The user initiates a search to find specific information or products on our website. |
| | 02 | A new user registers by creating an account, providing necessary information to access personalized services and features.<br>• Sign-in with email.<br>• Sign-in with Google. |
| | 03 | Users navigate through the system to view available insurance, including coverage details, benefits, and premium rates.<br>• Protection.<br>• Health Care. |
| | 04 | Users submit inquiries through the system's FAQ section to receive quick answers to common questions about policies, claims, and coverage. |
| | 05 | Users access "About Us" section for a brief overview of the insurance company's background, values, and mission. |
| Extensions | Step | Branching Action |
| | 2a | • The user must check their mail.<br>• The user must check their username. |

| Number | IT23228276 |
|---|---|
| Use Case ID | UC002 |
| Use Case Name | Managing Payments |
| Summary | Accepting payments from the registered customers for their life insurance. |
| Priority | 4 |
| Pre-condition | Registered customer should accept the terms and conditions before the payment process. |
| Post-condition | The terms and conditions have been accepted by the registered customer and thereby the payment process has been completed. |
| Primary actor | Bank |
| Trigger | A registered customer wants to make a payment and purchase the product. |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | Users initiate the payment process within the Life Insurance Management System to settle premiums or fees associated with their policies. |
| | 02 | The system verifies payment transactions to ensure that payments are processes accurately and securely, confirming successful completion before updating the user's account. |
| Extensions | Step | Branching Action |
| | 2a | Payment verification – If payment is not valid an error message will be shown. |

Assignment 1

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## IT23223530-Thakkif Ahamed I.M.

### d) Individual Contribution

- Designed and drew the actor, **Agent** in the Use Case Diagram.

- Designed and made **two** Use Case Scenarios **for Agent (Support with customer problem, Introduce new package to the customer.)**

### e) Special Contribution

- Added new use cases to help construct the use case diagram.
- Shared some important ideas about Use Case Scenarios

### f) . Encountered Challenges

- We had a short period to finish.
- I had some difficulties when designing the appropriate primary scenario phases for the specified specific use case scenarios.

| Number | IT23223530 |
| --- | --- |
| **Use Case ID** | US003 |
| **Use Case Name** | Support with customer problem. |
| **Summary** | Agent check what are the problems and give solutions according to the problem. |
| **Priority** | 4 |
| **Pre-condition** | Enter login credentials and log in to the system. |
| **Post-condition** | Publish solution to customer. |
| **Primary actor** | Agent |
| **Trigger** | Agent wants to give solutions according to the problems |

| **Main scenario** | **Step** | **Action** |
| --- | --- | --- |
| | 01 | Enter to the customer help desk page. |
| | 02 | Check the problems produce by the customer |
| | 03 | Analyze the problem |
| | 04 | Clear solutions according to the problems revealed |
| | 05 | Publish the solutions to the customer |
| | 06 | Take the feedback from the customer |
| **Extensions** | **Step** | **Branching Action** |
| | 2a. | Analyze the previous statie |
| | 2b. | Analyze the previous report |
| | 2c. | Analyze the previous feedback and complains |

| Number | IT23223530 |
|---|---|
| **Use Case ID** | US004 |
| **Use Case Name** | Introduce new package to the customer. |
| **Summary** | Agent introduces to the customers new packages. |
| **Priority** | 5 |
| **Pre-condition** | Identify new life threat |
| **Post-condition** | Publish the new information to the system. |
| **Primary actor** | Agent |
| **Trigger** | Agent wants to introduce new insurance package to customer |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | Access to the admin panel. |
| | 02 | Visit the product section. |
| | 03 | Navigate to packages. |
| | 04 | Click on the update button. |
| | 05 | Add the relevant details of the package. |
| | 06 | Upload suitable image. |
| | 07 | Click on post after customer |
| **Extensions** | **Step** | **Branching Action** |
| | a. | If use credentials are wrong, sent the error message. |
| | b. | Receive the conformation message from system. |
| | c. | Receive and send error message. If there is an error |

## IT23220942-Thanis Ahamed A.R.

a) **Individual Contribution**

- Designed and drew the actor, **Admin** in the Use Case Diagram.

- Designed and made a Use Case Scenarios for **Admin (Maintain the webpage).**

b) **Special Contribution**

- provided some helpful suggestions to the group and consistently helped the

  team to advance the project.

- Presented the most recent concepts on the use cases of The Website Admin

c) **Encountered Challenges**

- Insufficient time due to midterm exams

- Had some difficulties when meeting the group members to work together

  because of the holidays.

| Number | IT23220942 |
|---|---|
| Use Case ID | UC005 |
| Use Case Name | Maintain the webpage. |
| Summary | Responsible for maintaining and optimizing the online platform |
| Priority | 4 |
| Pre-condition | The manger should be logged in to the admin account. |
| Post-condition | Admin can maintain the system data. |
| Primary actor | Admin |
| Trigger | Web users should register to view the offers and packages. |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | The admin can view the FAQs and make any necessary changes if needed. |
| | 02 | The admin is able to manage the details and the information of the users. |
| | 03 | The admin can view and manage the customer's reviews. |
| | 04 | The data base can be updated by the admin. |
| Extensions | Step | Branching Action |
| | 1a. | Login into the admin account |

| Number | IT23220942 |
|---|---|
| **Use Case ID** | UC006 |
| **Use Case Name** | Monitor Website performance |
| **Summary** | Web admin needs to insure weather website runs smoothly |
| **Priority** | 4 |
| **Pre-condition** | Logs into the admin panel |
| **Post-condition** | Web admin has been logged into his account |
| **Primary actor** | Web Admin |
| **Trigger** | Web admin should have been logged into admin account to access customer data |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | web admin should  login into the administer  panel |
| | 02 |  performance Monitoring  will be maintain by admin |
| | 03 | Real-time analytics will be summarize by the admin |
| | 04 | Admin take necessary action to optimize system and resources |
| | 05 | Admin logged from the administer panel |
| **Extensions** | **Step** | **Branching Action** |
| | 1a. | Show the error message when admin username and password incorrect |
| | 3a | Admin should maintain a record to present real-time analytics |

**Assignment 1**

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## IT23222236-Erathnage T.N.

a) **Individual Contribution**

- Designed and drew the actor, **Manager** in the Use Case Diagram.

- Designed and made **two** Use Case Scenarios for **Manager (Approve claims, Generating a report).**

b) **Special Contribution**

- Encouraged the other group members to finish the project

- Finalized The use case Diagram after organizing and coordinating the ideas of

  other group members.

c) **Encountered Challenges**

- Before finalizing it, the use case diagram's output had to be generated several times owing to unresolved difficulties.
- Having trouble deciding which Use Case Scenarios to include in the completed report

| Number | UC007 |
|---|---|
| Use Case ID | IT23222236 |
| Use Case Name | Generating a report |
| Summary | Generate a report while analyzing the details. |
| Priority | 7 |
| Pre-condition | The manager should get access for the system to create a report. |
| Post-condition | The manager analyzed the details and create a report. |
| Primary actor | Manager |
| Tigger | Manager wants to generate reports using latest details of the company |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | Log in to the website using user Id and password. |
| | 02 | Enter to the report section in website. |
| | 03 | The System is displaying what are the report types. |
| | 04 | Decide the purpose of the report. |
| | 05 | Select the report type. |
| | 06 | Filter out the necessary time period of the data. |
| | 07 | Generate the necessary report. |
| | 08 | Ensure the accuracy, completeness and clarity of the created report |
| | 09 | Upload the report into the website. |
| Extensions | Step | Branching Action |
| | 01. | If user credentials are wrong, send error message and back to the login. |
| | 08. | If the report seems to be unclear, rearrange the report making correctly. |
| Open Issues | 01 | Under evaluation leads to the bad effect of the company goodwill |
| | 02. | Over evaluation leads to minimize the profit margin of the company. |

| Number | UC008 |
|---|---|
| Use Case ID | IT23222236 |
| Use Case Name | Approve claims |
| Summary | The manager checks what are the applied claims by the customer and approve or rejected them. |
| Priority | 8 |
| Pre-condition | Enter login credentials and log in to the system. |
| Post-condition | Approve claims and pay. |
| Primary actor | Manager |
| Tigger | Manager decided to approve and review the customer claims. |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | Log in to the website using user Id and password. |
| | 02 | Check what is the insurance package requested by customer. |
| | 03 | Check whether the insurance application with required medical document and the paid medical bills submitted correctly. |
| | 04 | Check whether the installments of insurance paid in time by customer. |
| | 05 | Check the claim items along with the package conditions. |
| | 06 | Identify the due amount of the claim actually paid to the customer. |
| | 07 | Approvement will be given and the payment will be made to the customer account. |
| Extensions | Step | Branching Action |
| | 01. | If user credentials are wrong, send error message and back to the login. |
| | 02. | If customer has submitted incomplete documents and claim form. Claim rejected |
| | 03. | If the customer doesn't pay the installment regularly, claim will get rejected. |
| Open Issues | 01. | Under evaluation leads to the bad effect of the company goodwill. |
| | 02. | Over evaluation leads to minimize the profit margin of the company. |

## IT23222786 – Budara V.P.R.

### a) Individual Contribution

- Designed and drew the actor**, Registered customer** in the Use Case Diagram.

- Designed and made **two** Use Case Scenarios for **Register Customer (Pay the Monthly Payment and Claim an insurance)**

### b) Special Contribution

- Helped to finalized the Use Case Diagram.

- Shared ideas and opinions about other members' useful cases, which was useful.

- Introduced a few new use cases that supported in the creating of the use case diagram.

- Made the Final document

### c) Encountered Challenges

- Faced some difficulties when summarizing the whole content for The Use Case Scenarios.

-  Due to our hectic schedule, we had some trouble meeting up with the group members in person to collaborate.

- Due to the impending midterm exam, we had to manage the time

| IT Number | IT23222786 |
|---|---|
| Use Case ID | UC009 |
| Use Case Name | Claim a Insurance |
| Summary | The Customer logs in to his account and then requests for a Insurance Claim |
| Priority | 4 |
| Pre-condition | The Customer has to log into the account |
| Post-condition | The Customer sends the Claim successfully through system |
| Primary actor | Registered Customer |
| Trigger | Customer wants to Apply a Claim  Insurance |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | The Customer visits the website |
| | 02 | User (Customer) log in to the user account |
| | 03 | Navigates to the Claim Submission page |
| | 04 | Gather Information that Need |
| | 05 | Fill the Claim Form |
| | 06 | Submit the Claim |
| | 07 | Verifies that the Claim is sent Successfully |
| Extensions | Step | Branching Action |
| | 2.a | The system generates an error massage if the User Name is wrong |
| | 2.b | The system generates an error massage if the password is wrong |
| | 5.a | System is informing to user to save the data (in the form) as draft if user leaves the page. |
| | 7.a | the user can cancel the claim after the submitted |
| Open Issues | | o   There is no personalized insurance packages<br>o  System should have to protect the user's details |

| Number | IT23222786 |
|---|---|
| Use Case ID | UC010 |
| Use Case Name | Pay the Monthly Payment |
| Summary | Customer log in to the account and tries to pay the monthly payment. |
| Priority | |
| Pre-condition | The User (Customer) must have to log into the account |
| Post-condition | The Customer successfully paid the monthly payment |
| Primary actor | Registered Customer |
| Tigger | The Customer decides to pay the monthly payment |

| Main scenario | Step | Action |
|---|---|---|
| | 01 | The Customer visits the website |
| | 02 | User (Customer) log in to the user account |
| | 03 | Navigates to the Pay Online page |
| | 04 | Click on Monthly Insurance payment |
| | 05 | Select a payment method |
| | 06 | Enter the pertinent payment information |
| | 07 | Click the PAY NOW option. |
| | 08 | Verifies that the money was sent successfully |
| Extensions | Step | Branching Action |
| | 2.a | The system generates an error massage if the User Name is wrong |
| | 2.b | The system generates an error massage if the password is wrong |
| | 5.a | Select the relevant bank account |
| | 5.b | Select the relevant e-wallet address |
| Open Issues | | • Because there were two factor authentication system can be trust<br>• Certain customers are unable to access their bank accounts because certain banks lack the required global capability. |