

Ndivhuwo Ndou

ST10281928

PROG6212 – POE – PART 1

## Table Of Contents

|                        |    |
|------------------------|----|
| Documentation.....     | 3  |
| UML Class Diagram..... | 4  |
| Project Planning.....  | 4  |
| GUI UI .....           | 6  |
| Reference List.....    | 11 |

# Documentation

## Introduction

The Contract Monthly Claim System is a system that is meant to assist the lecturer and administrators in processing claims.

### Design Choice:

#### *Database:*

For the database of the system, we will be using a relational database because I understand what the different entities are, and which entities relate to each other. The entities that will be present are going to be also used to transmit real time data (Coronel and Morris, 2018).

#### *Application Architecture:*

For the architecture of the application, I decided to use MVC to account for the possible scalability of the system. The system also needs to be a system that is on the web and can hold multiple users all the time. Since the application is not built for a specific company, it is built for anyone who is an IC (Independent Contractor) or Administrators for an institution to use, so it will need to be on the cloud in future or just downloaded as an application, and using MVC gives me the functionality and the creativity to really build this system with to factor that in.

#### *GUI design:*

For the GUI design I went for a very simple design that is easy to use and is straightforward. The application is not supposed to do fancy things since it will be merely used to submit and track claims, this makes the pure goal of it to do just that and nothing more (Tidwell, 2010). To achieve those goals, I put tabs on the navigation that will tell you where to exactly to go and for what purpose. I also put an explanation on the Home Page to inform users of what the system is for and how to use it.

### Assumptions and Constraints:

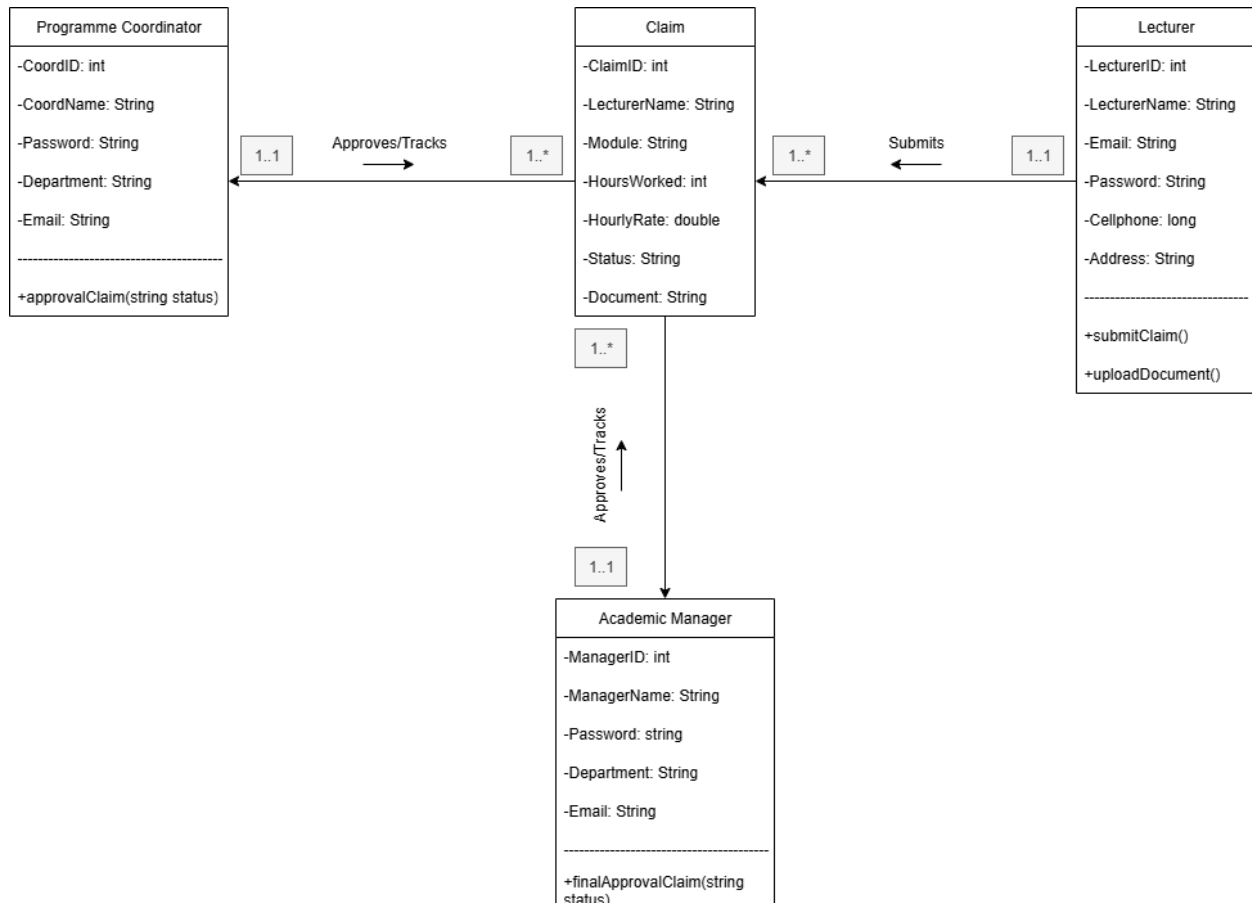
The assumptions I have about the project are the following:

- Internet connection is needed to submit and process claims.
- Multiple lecturers could need approval from the same administration.
- Claims need approval from two members of the administration.

The constraints I have about the project are the following:

- It must be built using MVC or WPF for Microsoft applications.
- Claims need both admins' approval.
- Limited time frame to build the project.

## UML Class Diagram



(GeeksforGeeks, 2018)

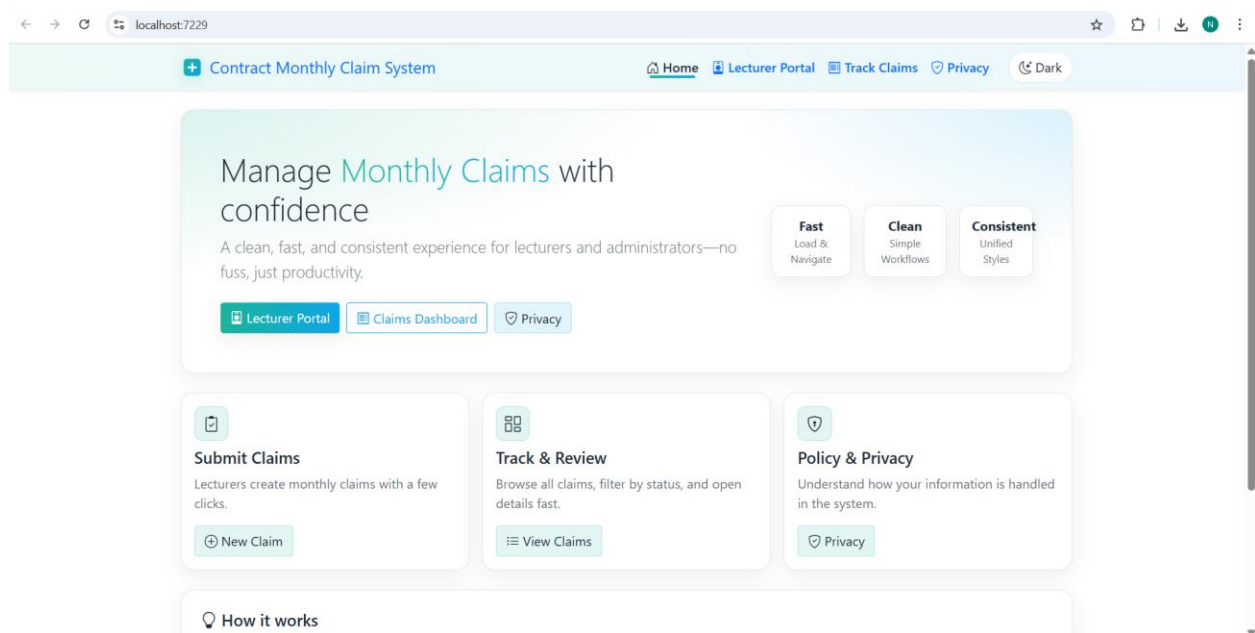
## Project Planning

| Tasks                   | Description   | Duration             | Deliverable   |
|-------------------------|---|----------------------|---|
| Planning                | Getting information on the system e.g. User & System requirements (Gido et al., 2022) | 2 weeks (Week 1 - 2) | Documentation, Project Planning, Project application Document |
| Database and GUI Design | From the information gathered, we will  | 2 weeks (Week 3 - 4) | GUI and UI mockups,   |

|   |   |                        |  |
|---|---|------------------------|--|
|   | plan the database of the system and the create a GUI wireframe  |                        | Database ERD and class diagrams.                                     |
| Project development (GUI focused)           | Begin building the prototype using the GUI and trying to see if there are any changes needed to be done                         | 2 weeks (Week 5 - 6)   | Prototype focused only on the GUI there will be little functionality |
| Project development (Functionality focused) | Continuing off the GUI, we will start adding functionality to the system, and including the database                            | 3 weeks (Week 7 – 10)  | Prototype including the functionality of the system                  |
| Project assessment                          | Go back and assess the prototype and fix any errors that are there, and if the prototype meets the user and system requirements | 2 weeks (Week 11 – 12) | Minimal error prototype with functionality working                   |
| Submission                                  | Presenting this prototype to the client for them to use it  | 1 week (Week 13)       | Client approval of the prototype                                     |

(Atlassian, n.d.)

# GUI UI



localhost:7229/Lecturer

Homework help

Contract Monthly Claim System

[Home](#) [Lecturer Portal](#) [Track Claims](#) [Privacy](#) [Dark](#)

# My Claims

Create, track, and manage your monthly claims.

Submit New Claim

Total Claims  
2

Hours Submitted  
18

Pending  
1

Search module, status...

All Pending Approved Rejected Accessed

| Module   | Hours | Rate | Status   | Document |         |      |        |
|----------|-------|------|----------|----------|---------|------|--------|
| Prog6212 | 10    | 300  | Pending  | No File  | Details | Edit | Delete |
| Database | 8     | 150  | Accessed | No File  | Details | Edit | Delete |

© 2025 Contract Monthly Claim System

Fast UI - Clean Theme

localhost:7229/Claim

Contract Monthly Claim System

[Home](#) [Lecturer Portal](#) [Track Claims](#) [Privacy](#) [Dark](#)

# Claims

Track and review all submitted claims at a glance.

Home

Total Claims  
2

Total Hours  
18

Average Rate  
\$ 225

Search lecturer, module, status...

All Pending Approved Rejected Accessed

| Lecturer Name | Module   | Hours | Rate | Status   | Document |
|---------------|----------|-------|------|----------|----------|
| Dr. Smith     | Prog6212 | 10    | 300  | Pending  | No File  |
| Prof. Johnson | Database | 8     | 150  | Accessed | No File  |

© 2025 Contract Monthly Claim System

Fast UI - Clean Theme

localhost:7229/Lecturer/Create

Homework help

Contract Monthly Claim System

[Home](#) [Lecturer Portal](#) [Track Claims](#) [Privacy](#) [Dark](#)

## Submit New Claim

Provide the details below and attach a supporting document if required.

Lecturer Name

e.g. Dr. A. Smith

Module

e.g. PROG6212

Hours Worked

e.g. 10

Hourly Rate

\$ e.g. 300

Upload Document

Drag & drop file here  
or click to browse

No file chosen

Submit

Reset

Back to My Claims

Submission Summary

Draft

These values update as you type.

|                 |      |
|-----------------|------|
| Hours           | 0    |
| Rate            | 0    |
| Estimated Total | 0.00 |

Tip: Ensure the document shows the period and module.

localhost:7229/Lecturer/Details/1

Homework help

Contract Monthly Claim System

[Home](#) [Lecturer Portal](#) [Track Claims](#) [Privacy](#) [Dark](#)

## Details

Lecturer:

Dr. Smith

Module:

Prog6212

Hours:

10

Rate:

300

Status:

Pending

© 2025 Contract Monthly Claim System

Fast UI - Clean Theme



localhost:7229/Lecturer/Edit/1

Homework help

Contract Monthly Claim System

[Home](#)[Lecturer Portal](#)[Track Claims](#)[Privacy](#)[Dark](#)

Lecturer Name

Dr. Smith

Module

Prog6212

Hours Worked

10

Hourly Rate

\$ 300

Upload Document

Drag & drop file here  
or click to browse

No file chosen

Save

Reset

Back to My Claims

Submission Summary

Draft

These values update as you type.

|                 |         |
|-----------------|---------|
| Hours           | 10      |
| Rate            | 300     |
| Estimated Total | 3000.00 |

Tip: Ensure the document shows the period and module.

© 2025 Contract Monthly Claim System

Fast UI - Clean Theme

localhost:7229/Lecturer/Delete/1

Homework help

Contract Monthly Claim System

[Home](#)[Lecturer Portal](#)[Track Claims](#)[Privacy](#)[Dark](#)

Details

Lecturer: Dr. Smith

Module: Prog6212

Hours: 10

Rate: 300

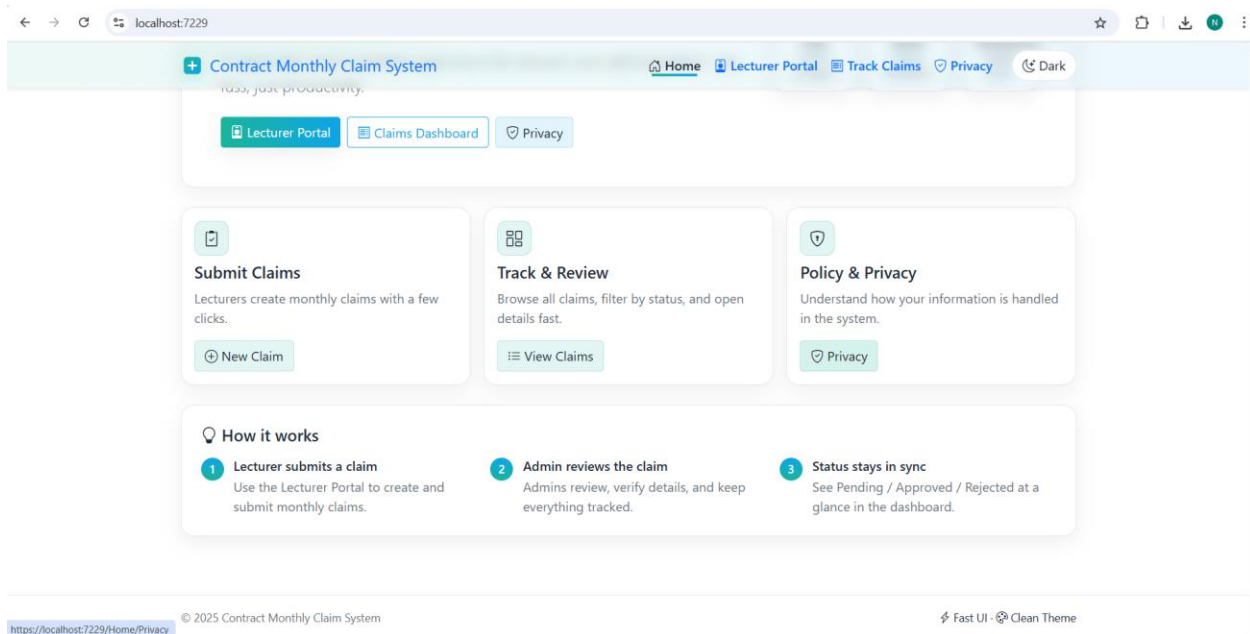
Status: Pending

Delete

Back to List

© 2025 Contract Monthly Claim System

Fast UI - Clean Theme



## Reference List

Atlassian (n.d.). *Project Planning Like a Boss | The Workstream*. [online] Atlassian.

Available at: <https://www.atlassian.com/work-management/project-management/project-planning> [Accessed 17 Sep. 2025].

Coronel, C. & Morris, S., 2018. Database Systems: Design, Implementation, & Management. 13th ed. Boston: Cengage Learning.

GeeksforGeeks (2018). *Class Diagram | Unified Modeling Language (UML)*. [online] GeeksforGeeks. Available at: <https://www.geeksforgeeks.org/system-design/unified-modeling-language-uml-class-diagrams/> [Accessed 17 Sep. 2025].

Gido, J., Clements, J., Baker, R., Harinarain, N. and Eresia-Eke, C. (2022). *Successful Project Management*. Second ed. Australia: Cengage.

Tidwell, J., 2010. Designing Interfaces: Patterns for Effective Interaction Design. 2nd ed. Sebastopol: O'Reilly Media.