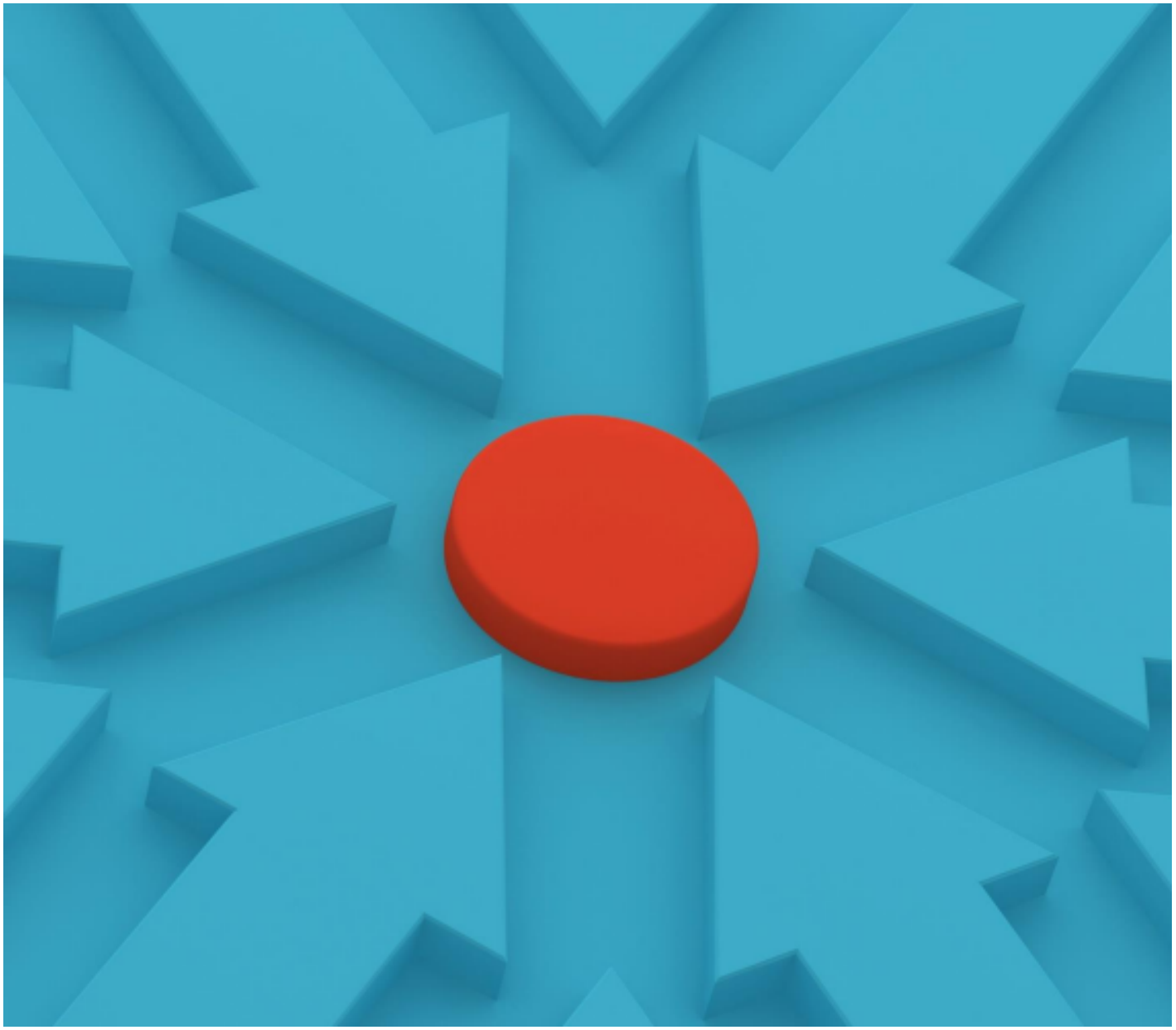

PROJECT TRACKING AND MANAGEMENT SYSTEM

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https://github.com/VikasRajput2002/Project-Tracking-and-Management-System

PURPOSE

Project Management (PM) is often still time consuming and inefficient. Repeatedly updating spreadsheets, drowning in post-its and participate in weekly update meetings. That's really a waste of time and effort. The purpose of Project tracking and management System is to help you foresee the risks and challenges that could derail the completion of a project. It applies proven methodologies and uses current software tools so you can plan, control, and monitor people, processes, and other components needed to make your project a success. It ensures that project gets completed in timely manner. And helps determine inefficient pieces of projects.

As you know, project management deals with various aspects of a project such as dividing the whole project into smaller tasks and subtasks, allocating resources to tasks, assessing risks that can cause delays, communicating project status with clients and stakeholders, etc. that collectively decides the success of the project. The prime function of a **project management system** is to assist managers with their everyday project management responsibilities.

SCOPE

The application will help manage the project and assign task to different people with deadline and make sure everyone remains updated with real time information about progress of project. Project management is where all processes meet, the central focal point from which all procedures derive, are specifically defined, scheduled and organized, following which they are communicated and assigned and subsequently followed up on and evaluated. Monitoring project progress to identify potential problems in a timely manner,

take corrective action and make sure projects are on track. This system can be used in Construction, Event Management, product management, Manufacturing, engineering projects and IT. This project can be customized according to needs of individual groups or clients.

INTRODUCTION

INTRODUCTION CONTAINS THE FOLLOWING SUBCATEGORIES:

Existing System:

Existing project management includes a set of developed techniques used for planning, estimating, and controlling activities. It is used in following methods to manage system:

- Gantt Chart : type of bar chart that illustrates a project schedule
- Regular Update meeting
- Use spreadsheet as time logs, requiring each member of the team to separately track their hours and record them in a **spreadsheet**.
- File approval
- Physical Reporting

Proposed System:

- Project Workspace: The place to the key insights on how each of the projects are performing - at a glance to get an overview of each project.

- Reporting: This is important for all team members when it comes to updating themselves on the project as a whole
- File sharing : being able to share and organize key project documents eliminates time wasted searching for files

- Activity: a powerful feed of real-time data outlining every update made from all team members to the project in real-time.

- Tasks: A clear and simple view of the steps involved in completing the project with the dates and team members who own the tasks outlined.

- Rating: For employees based on their performances and keep their track record.

- Communication: For smooth flow of communication, team members can communicate with each other, leave comments or pull requests.

Advantages Of Proposed System:

- Real Time Information: stay up to date and get the most accurate Information available. Everyone involved in the project needs to see the status and progress of the project in an instant

- Problem Identifiers: With project tracking there is no place for problems or issues to hide. Any budding issues are recognizable in an instant. This allows leaders to act and take back control of the situation.

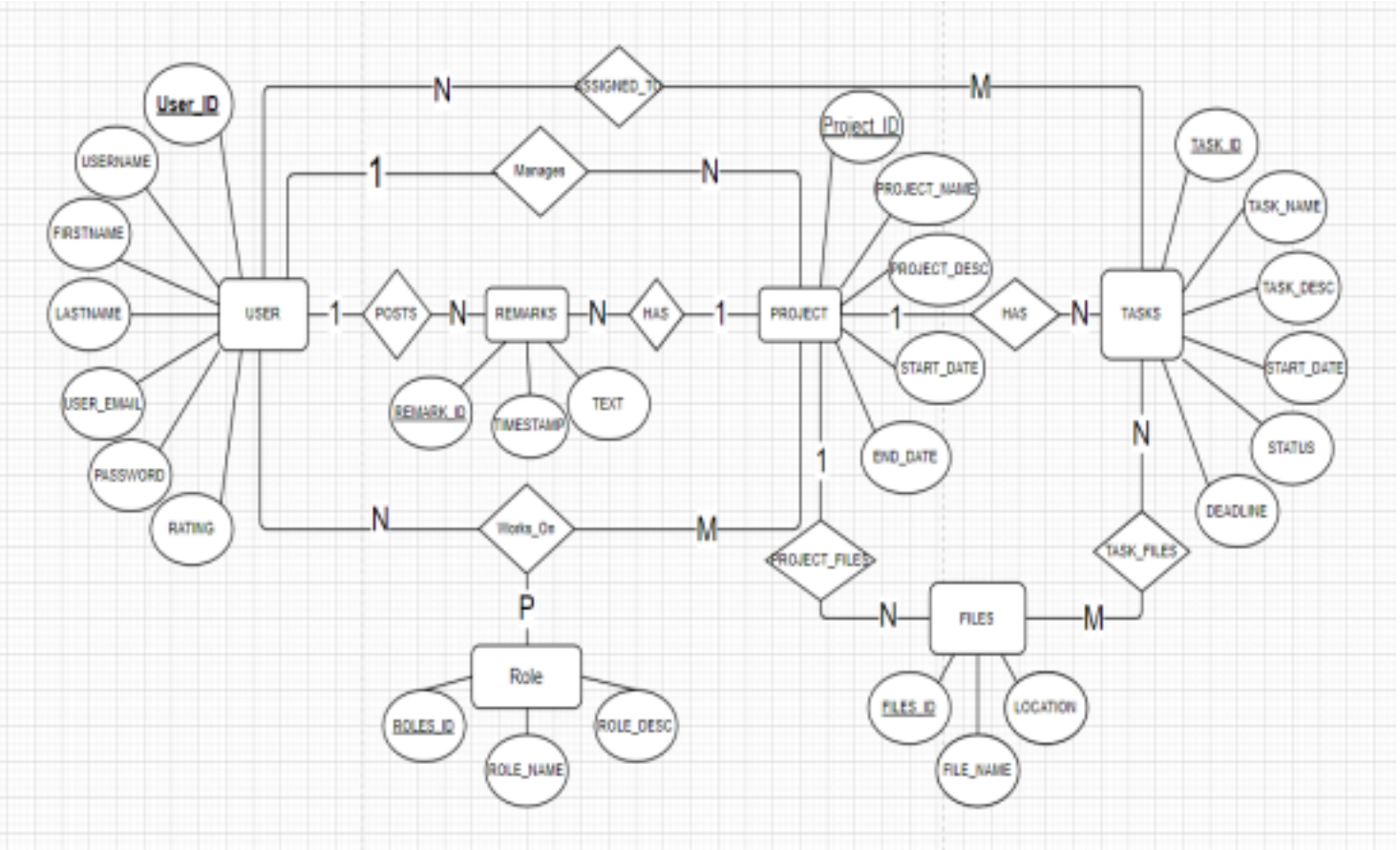
- Team Motivation: Collaboration is a key factor of every project. If every member has clarity on their role, they can work toward the group objectives

- Easy and Accurate Reporting: Reporting is often a painful task that project managers are required to do. Senior management want an overall view of each of the projects in an instant.

OVERVIEW OF THE SYSTEM

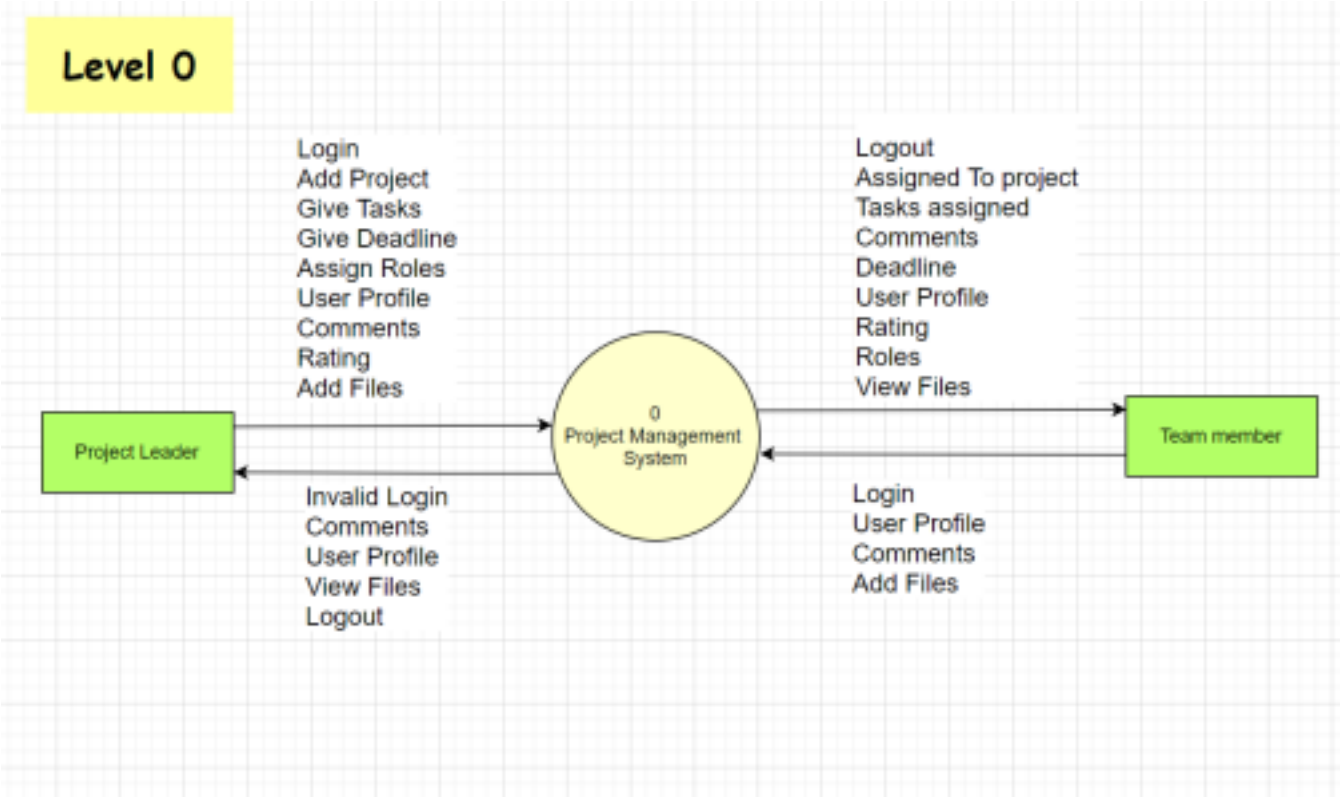
System Design

ER DIAGRAM

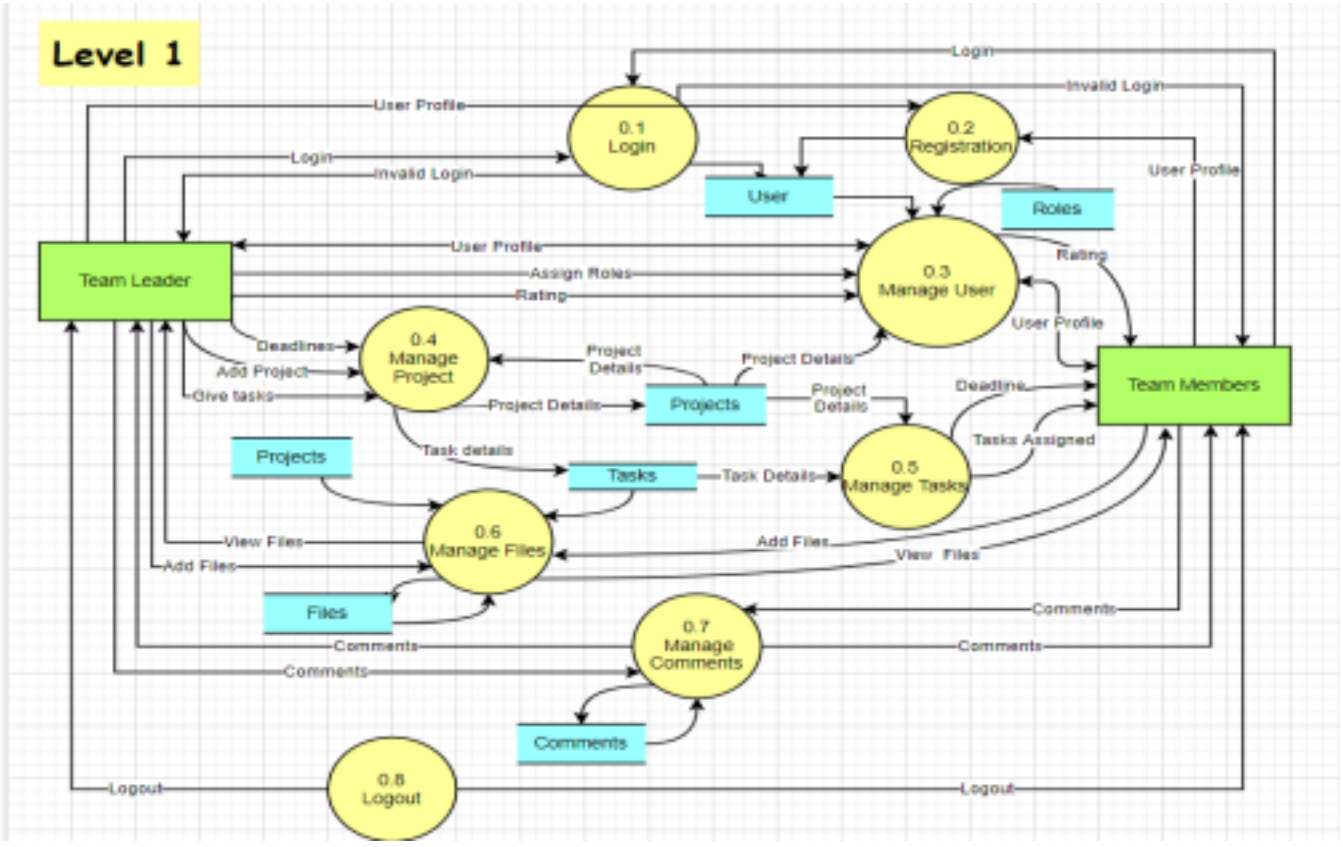


DFD AND USE CASE DIAGRAM

LEVEL 0 DFD



LEVEL 1 DFD



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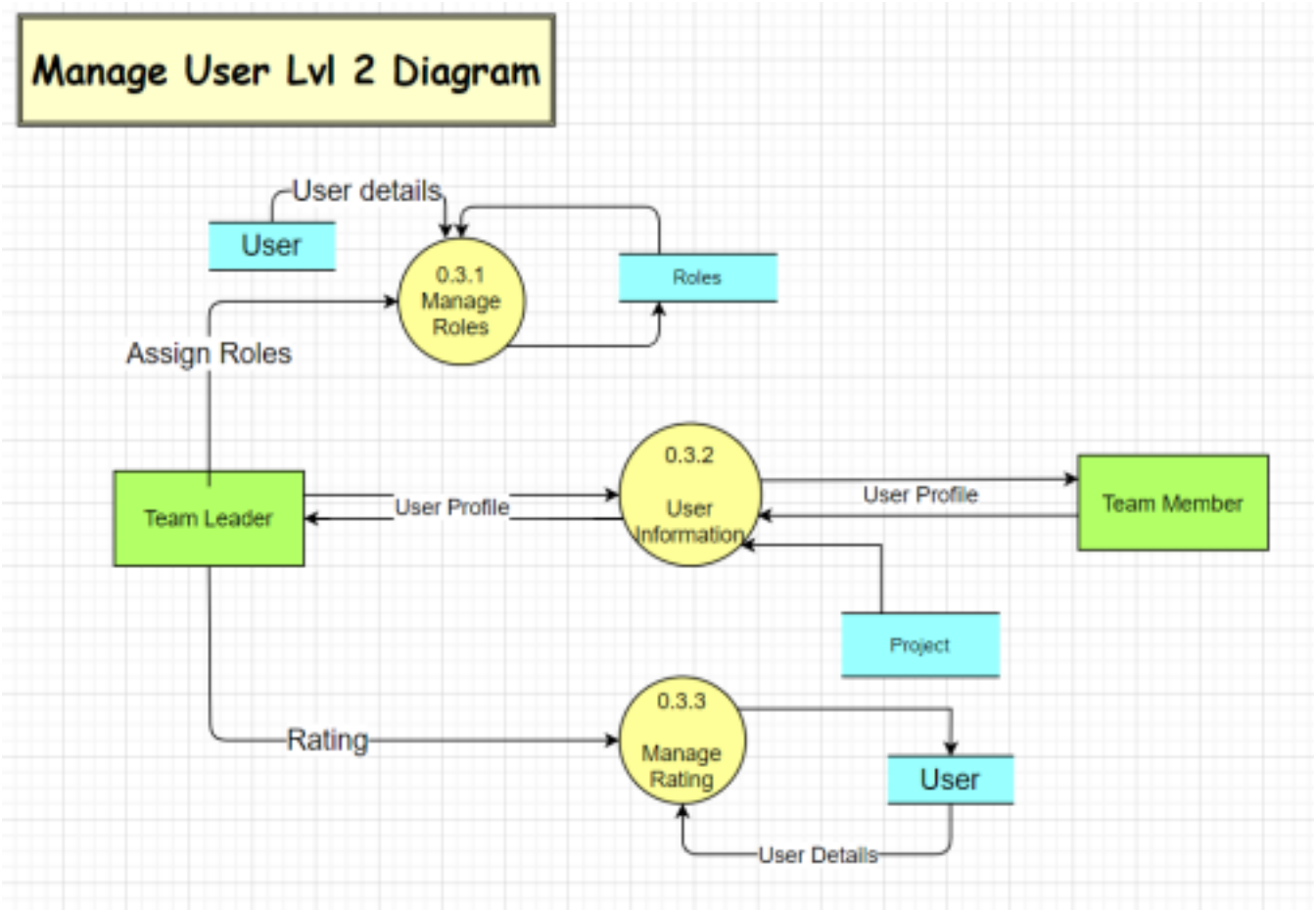
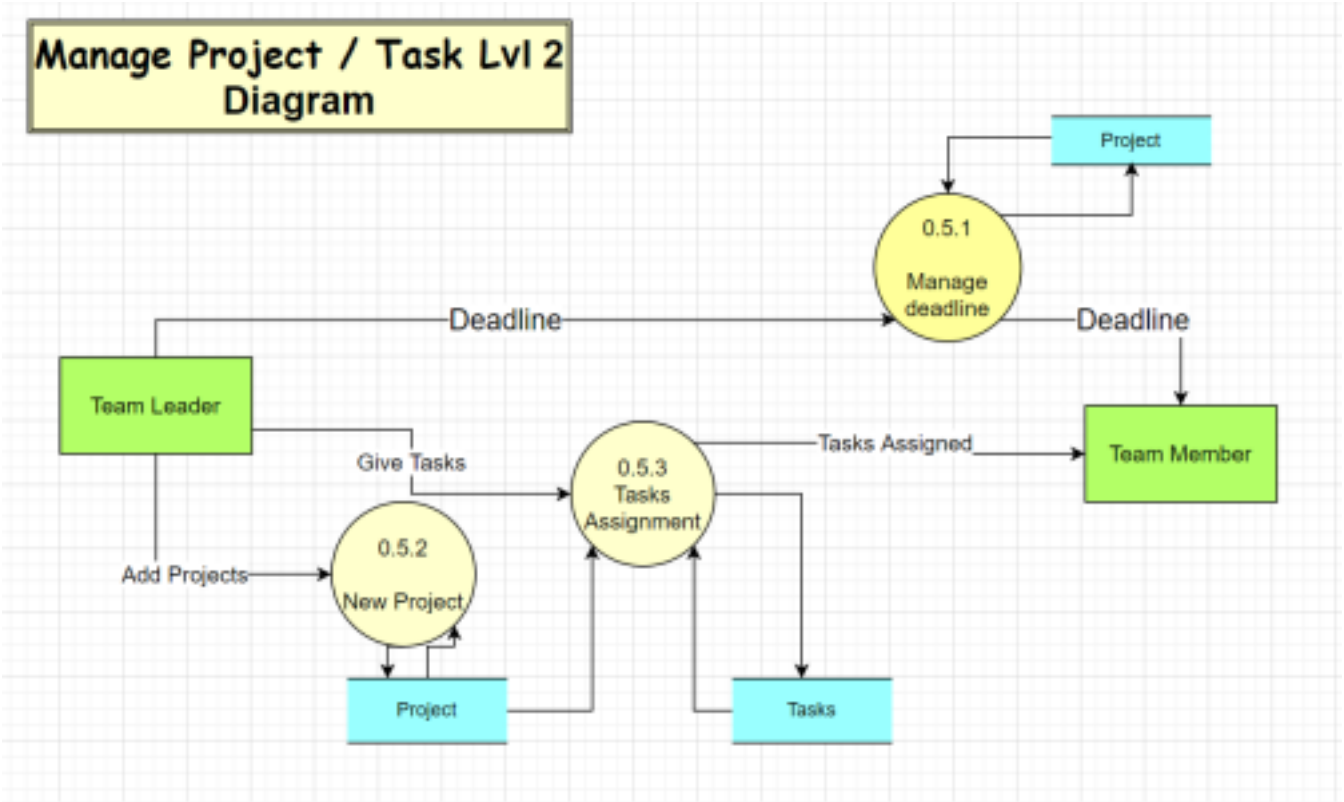




USE CASE DIAGRAM

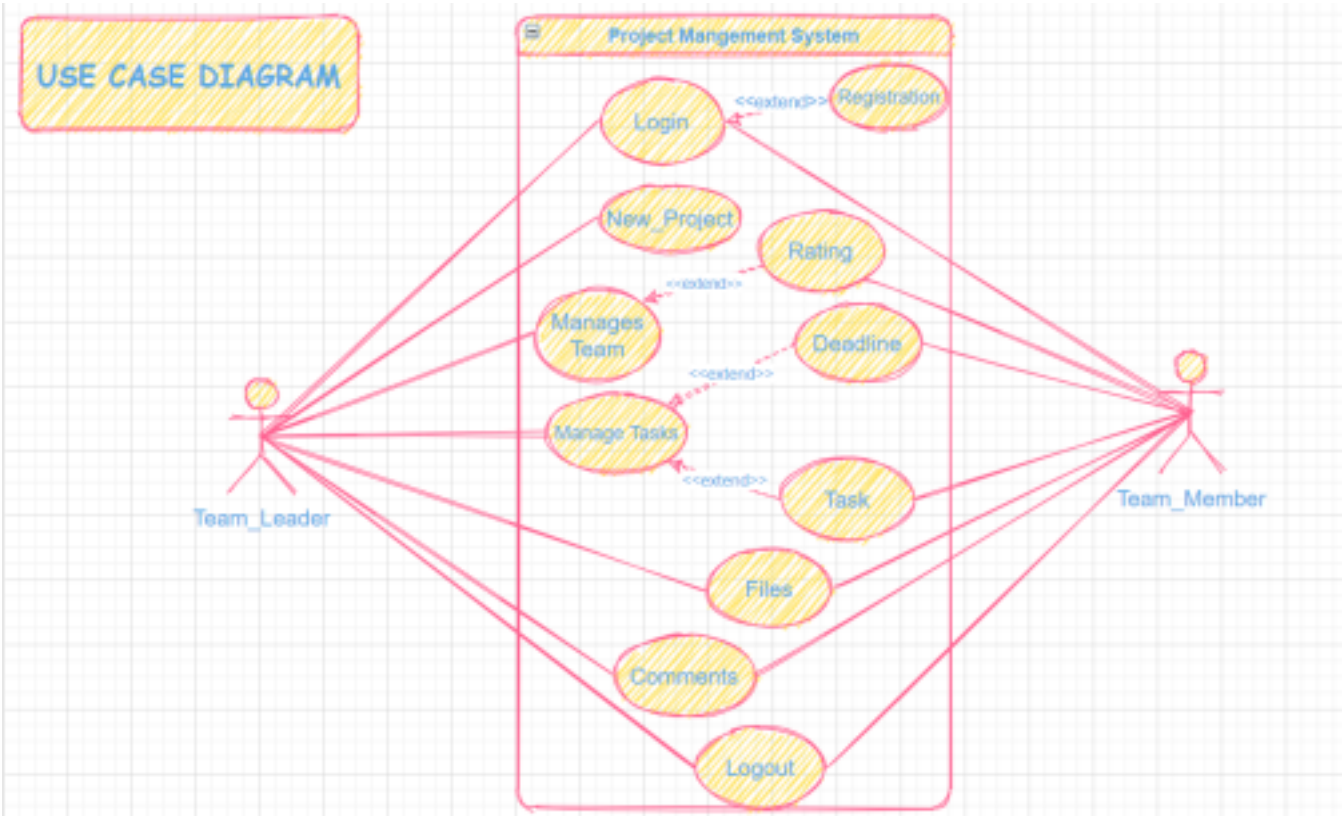
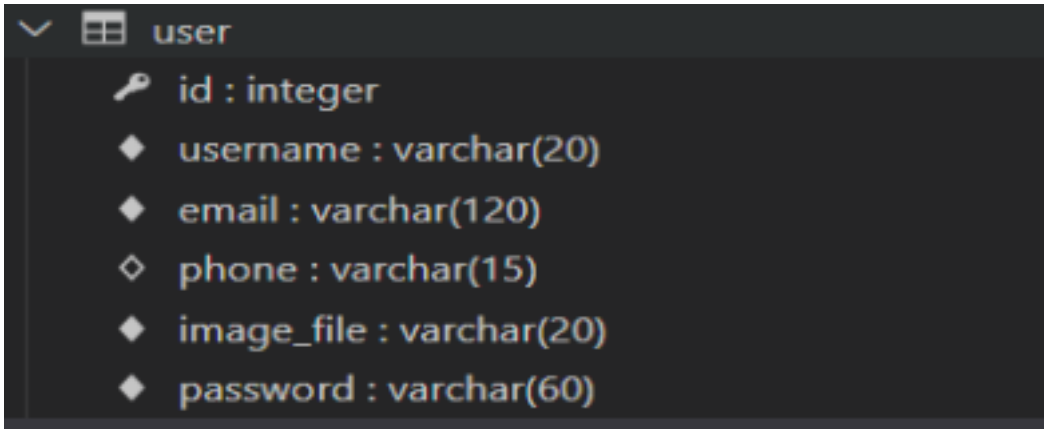
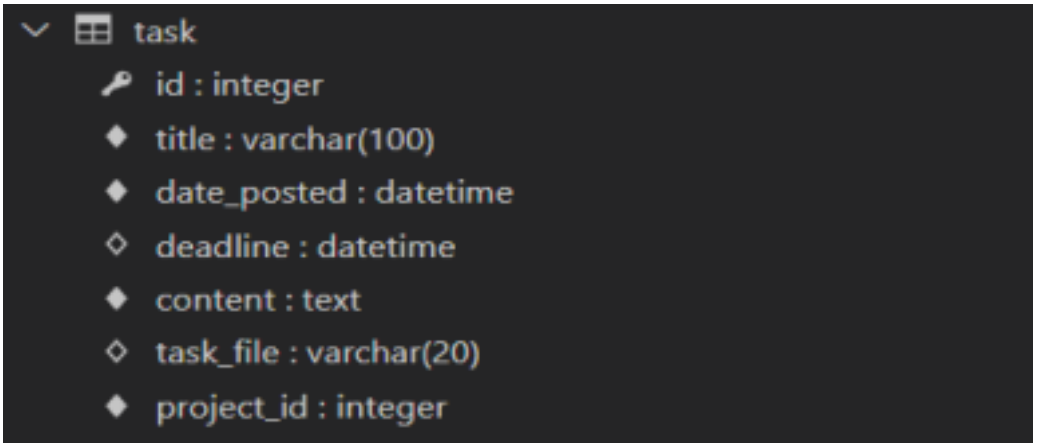
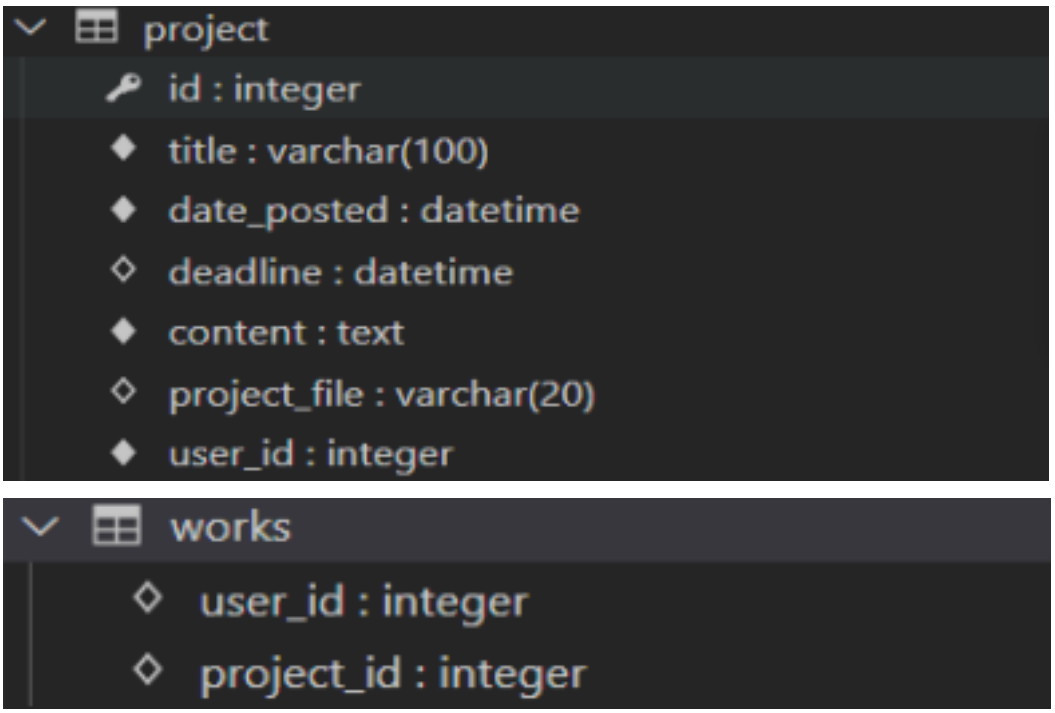


Table Structure







Application Requirements

```
astroid==2.5.2
autopep8==1.5.6
bcrypt==3.2.0
blinker==1.4
cachelib==0.1.1
cffi==1.14.5
click==7.1.2
colorama==0.4.4
dnspython==2.1.0
email-validator==1.1.2
Flask==1.1.2
Flask-Bcrypt==0.7.1
Flask-Login==0.5.0
Flask-Mail==0.9.1
Flask-Session==0.3.2
Flask-SQLAlchemy==2.5.1
Flask-WTF==0.14.3
greenlet==1.0.0
idna==3.1
isort==5.8.0
itsdangerous==1.1.0
Jinja2==2.11.3
lazy-object-proxy==1.6.0
```

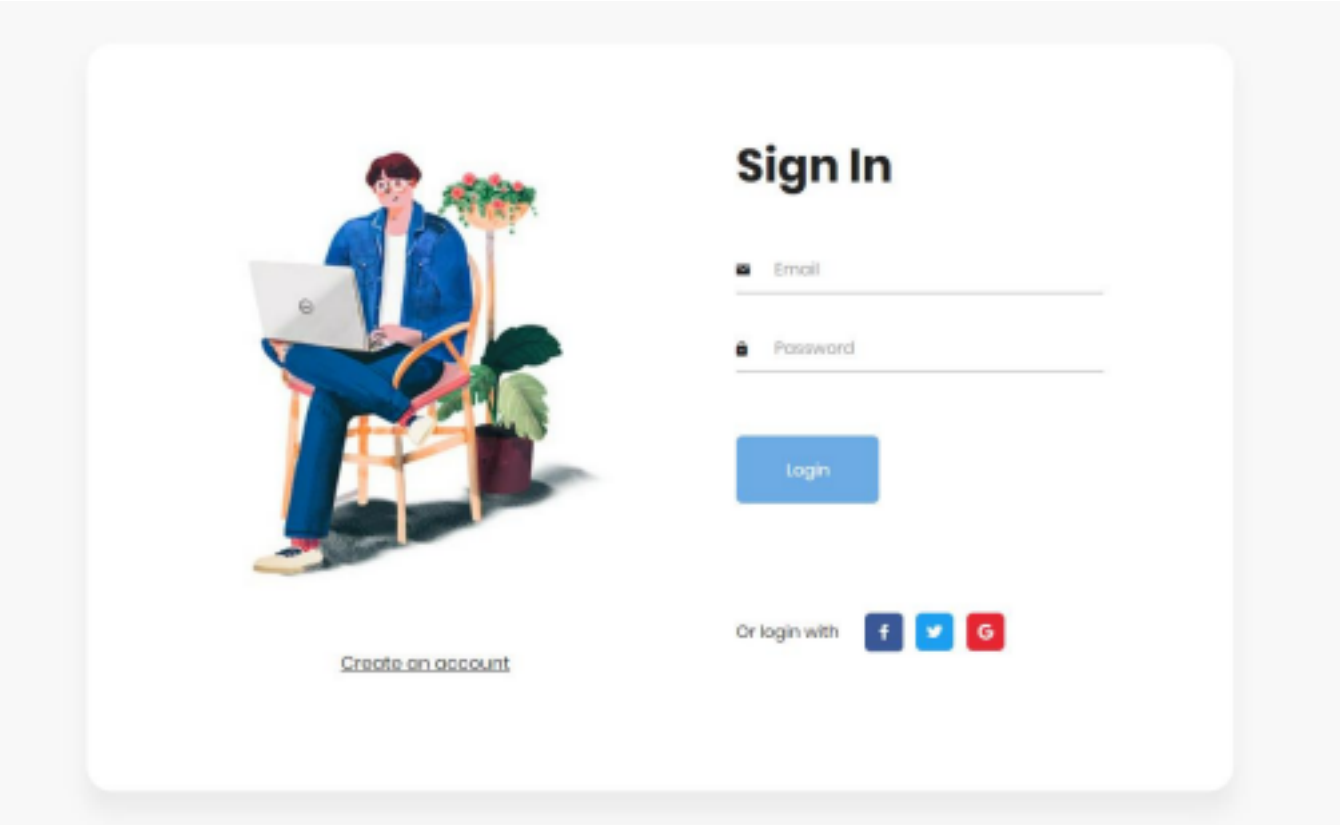
```
MarkupSafe==1.1.1
mccabe==0.6.1
phonenumbers==8.12.21
Pillow==8.2.0
pycodestyle==2.7.0
pycparser==2.20
pylint==2.7.2
pylint-flask-sqlalchemy==0.2.0
six==1.15.0
SQLAlchemy==1.4.4
toml==0.10.2
Werkzeug==1.0.1
wrapt==1.12.1
WTForms==2.3.3
```

Packaging And Structuring

```
Project Tracking And Managment
├── managment/
│   ├── __init__.py
│   ├── form.py
│   ├── models.sql
│   ├── site.db
│   ├── routes.py
│   ├── templates/
│   │   ├── base.html
│   │   ├── email.html
│   │   ├── invite.html
│   │   ├── layout.html
│   │   ├── login.html
│   │   ├── message.html
│   │   ├── profile.html
│   │   ├── project.html
│   │   ├── register.html
│   │   ├── task.html
│   │   └── team.html
│   │
│   └── static/
│       └── [.....]
├── venv/
│       └── [.....]
├── requirements.txt
└── run.py
```

SYSTEM INTERFACE

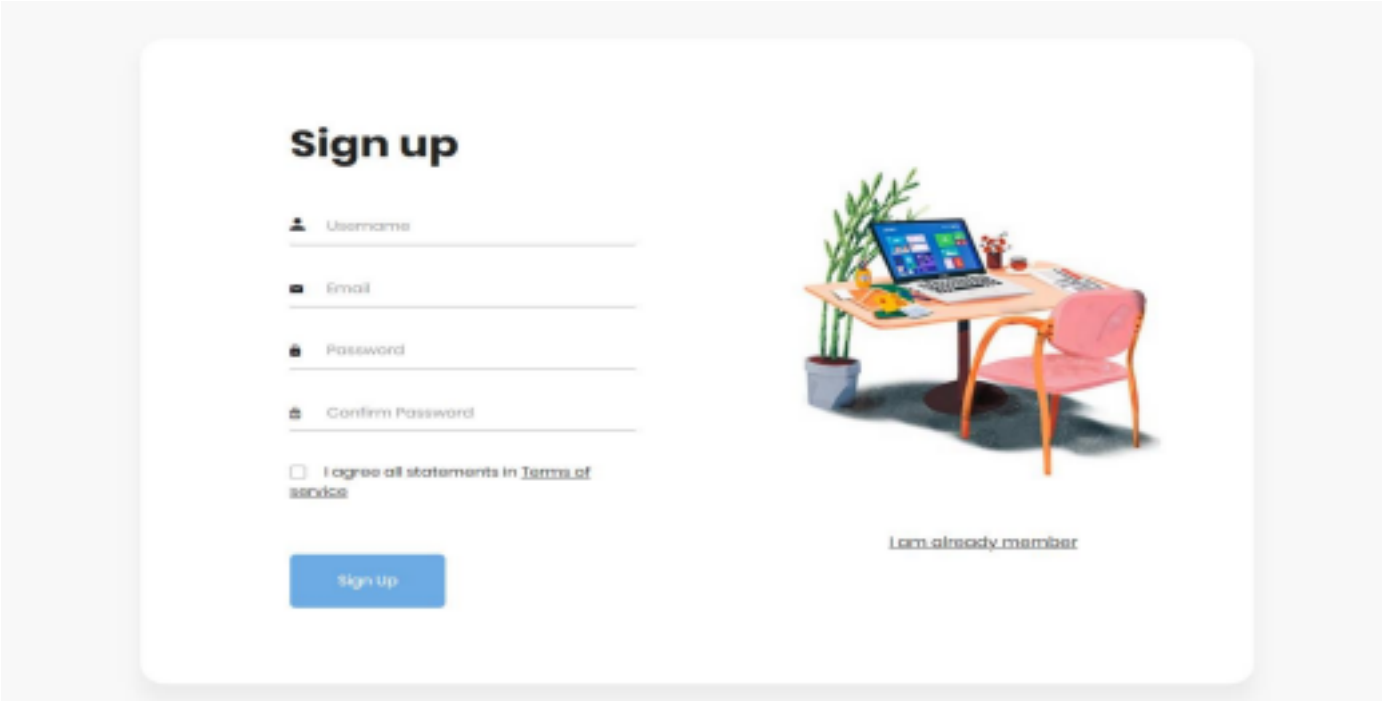
Sign In Page



- Our sign in page is our landing page. We can go to registration page on clicking on “Create an account.

- It gives invalid email address on wrong email input.

Registration Page

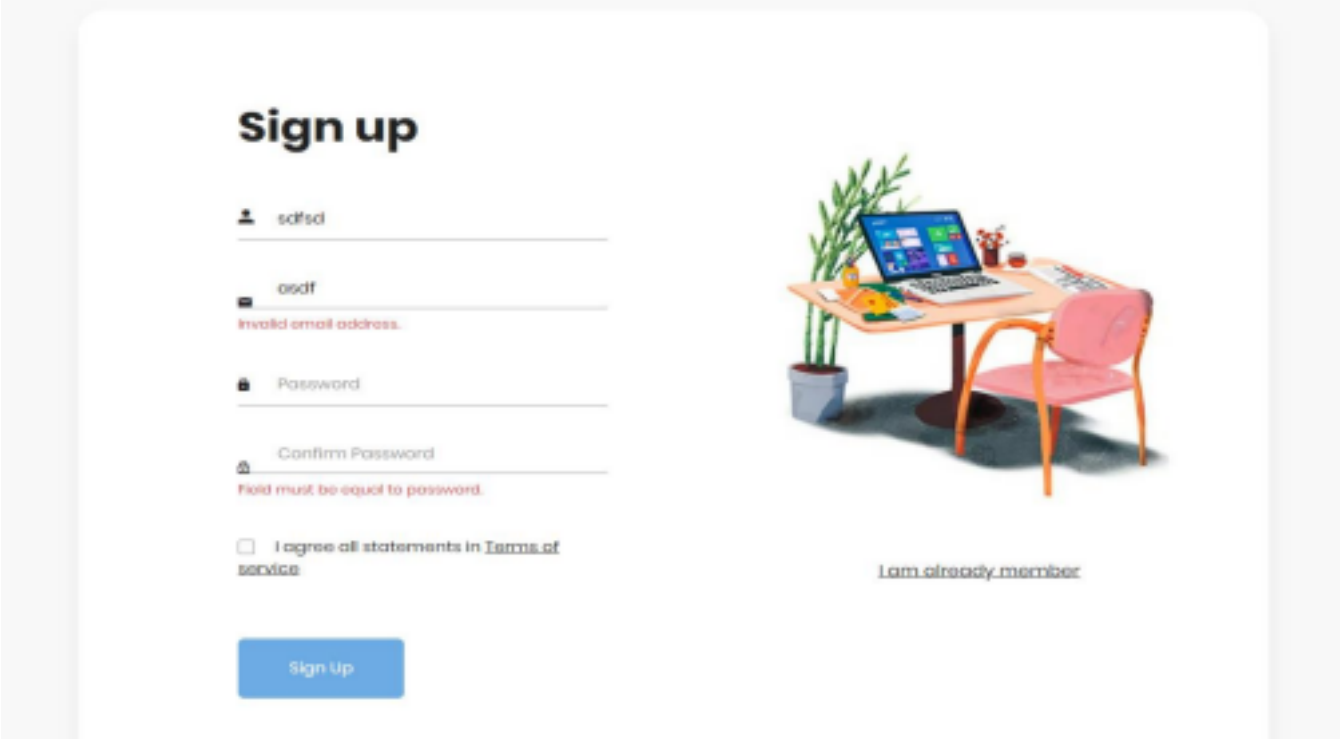


- Username: username with min length 3 and max 15 are only allowed

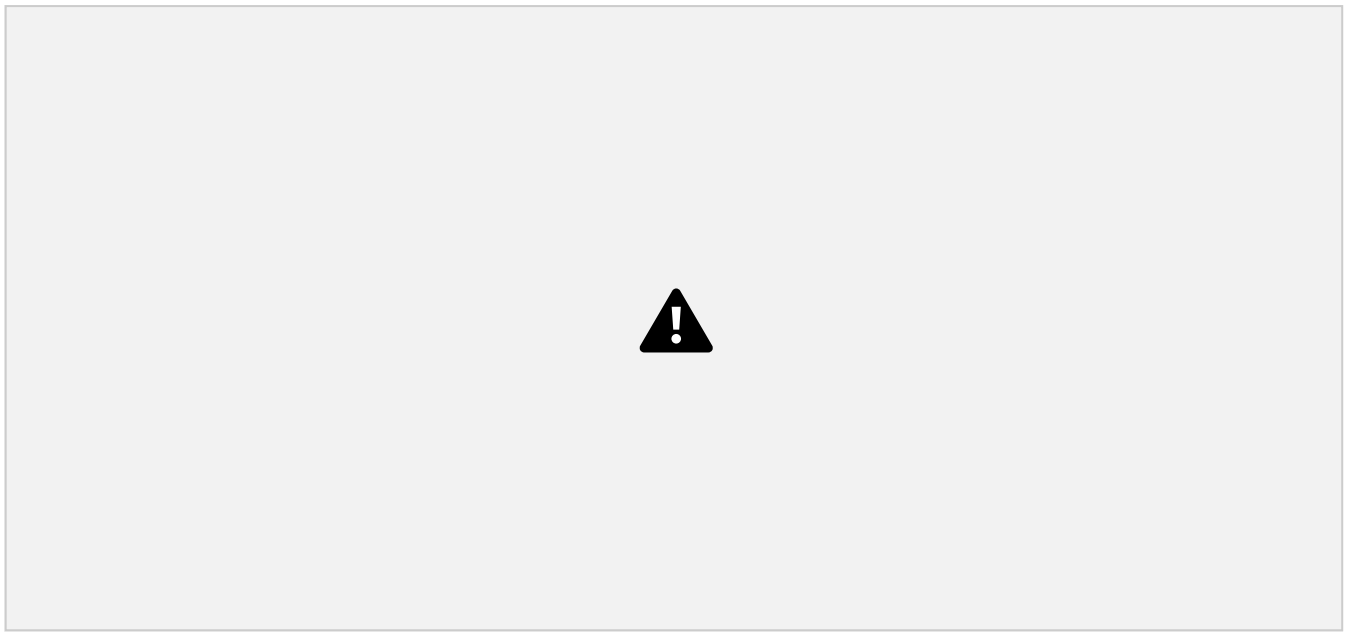
· Email: Only valid email address are allowed , otherwise it throws an error. It is achieved using wtform validators

· Both password and confirm password should be same otherwise it throws an error.

· We will be automatically directed to sign in page after signup or we can go directly go to sign in page on clicking on “I am already member”



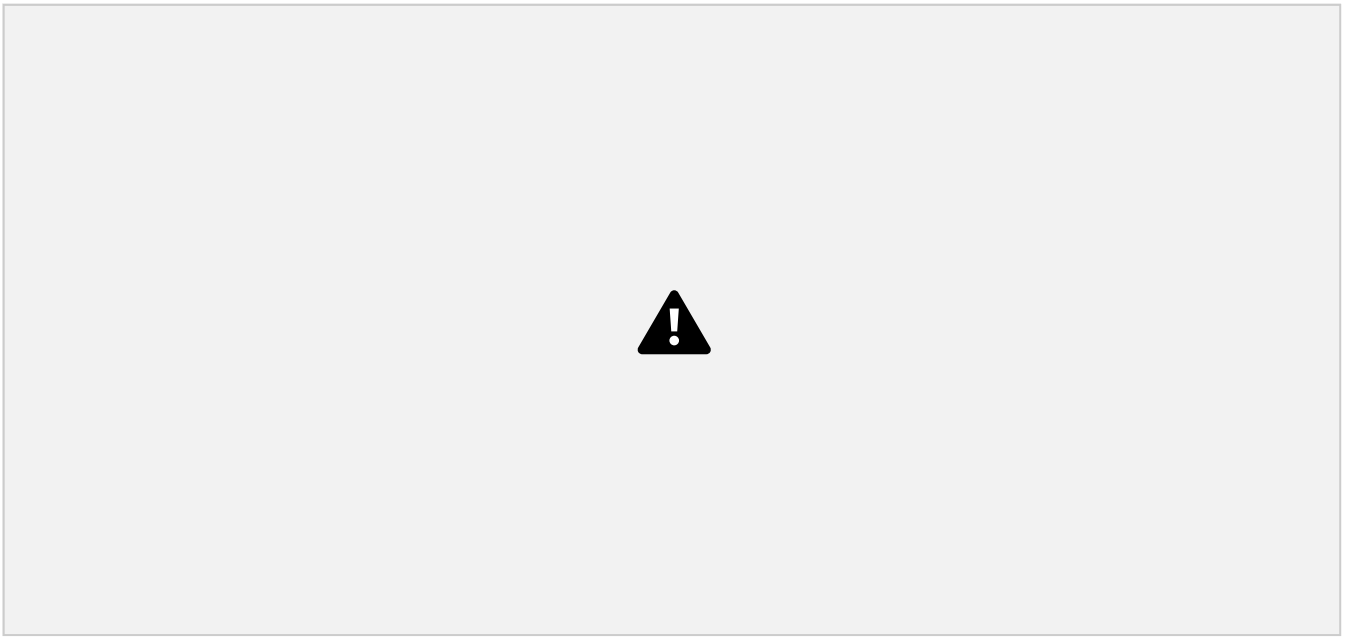
Project Workspace



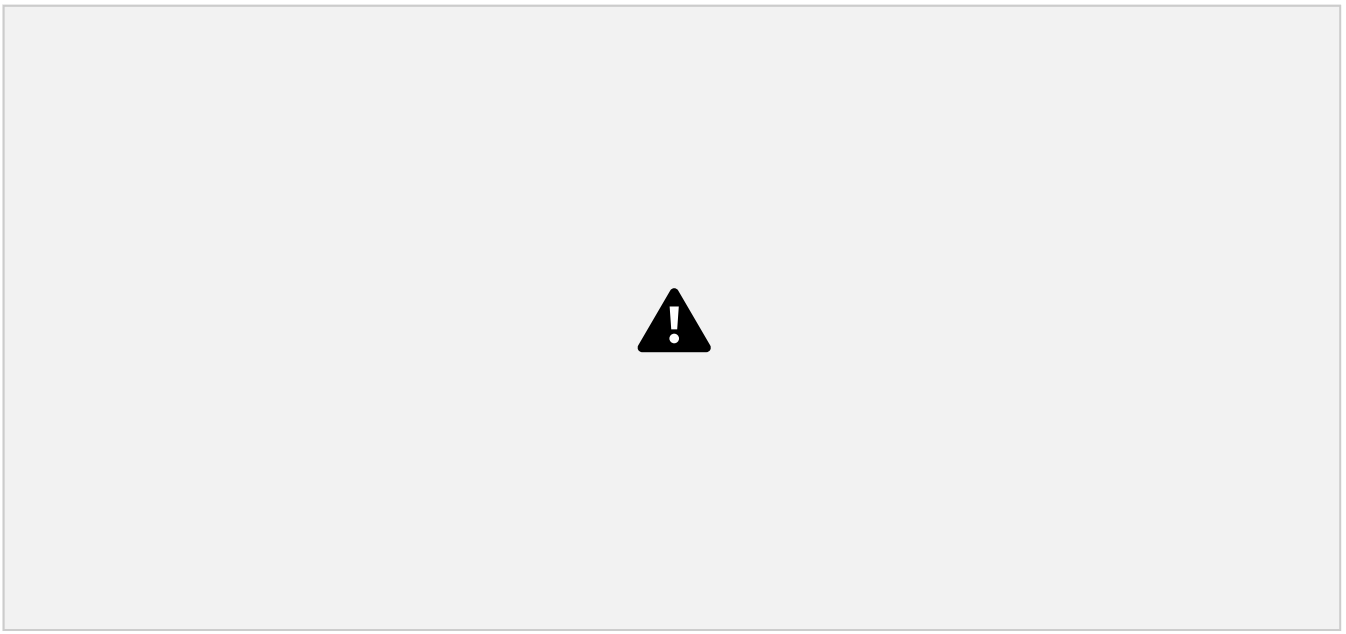
· After Sign In we will be redirected to our Project Workspace

- Here we can view all our projects And we can create new Projects here.
- On clicking on file icon we can view documents associated with that particular project. Only pdf and txt file are allowed to be uploaded.
- Click on go to view task associated with that project.
- Only user who created the Project is allowed to delete the project, rest can only view

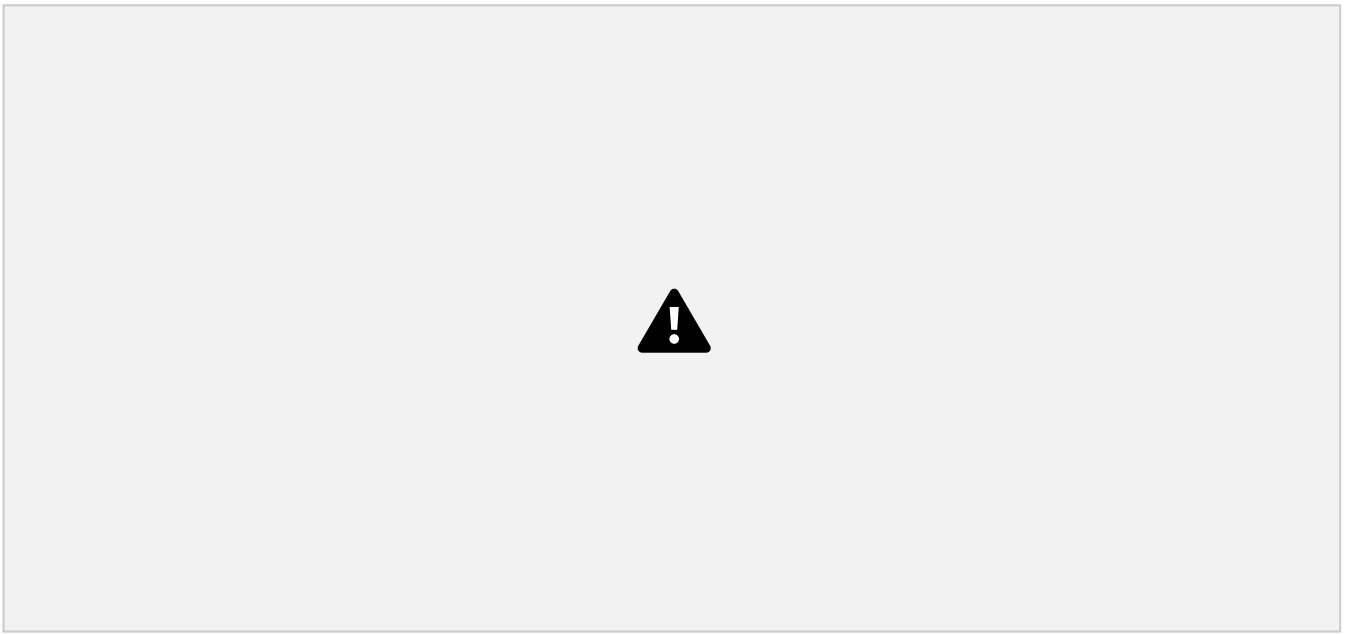
Task Workspace



- Interface of Task workspace is similar to project workspace
- Here we can view all our Tasks And we can create new Tasks here related to chosen project in previous slide
- If we try to reach task workspace through side bar it fives error asking user to choose a project. But after once choosing a project we can navigate using side bar

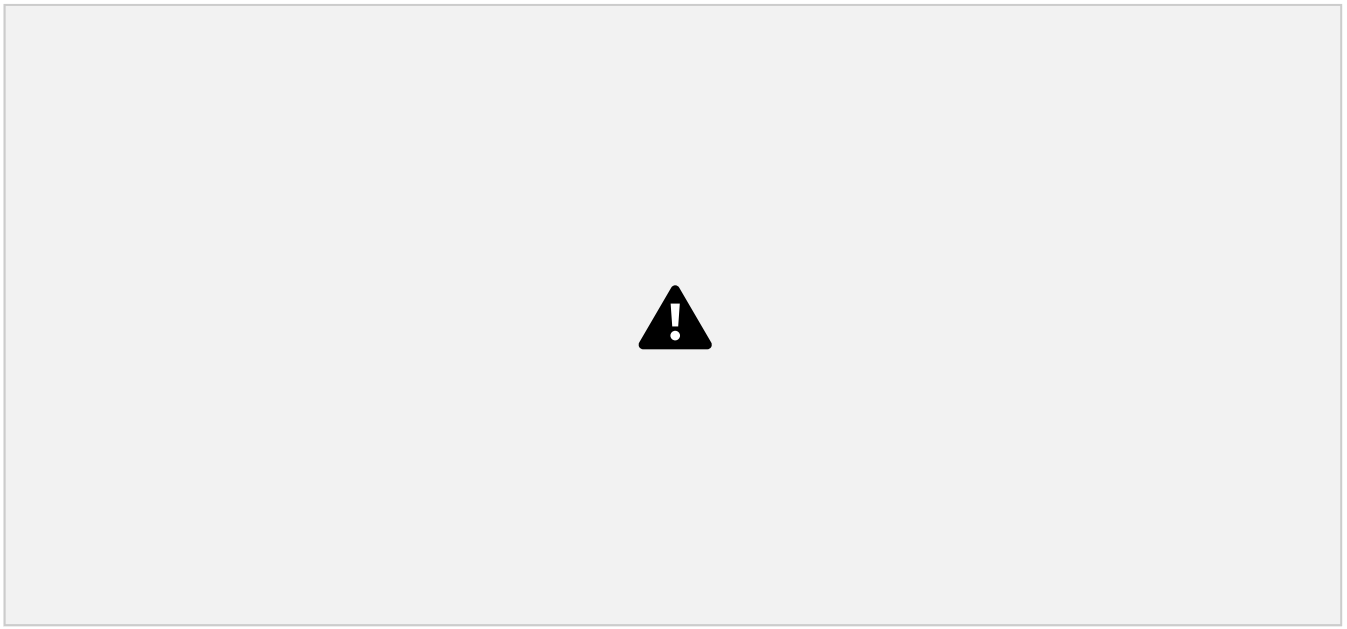


Profile



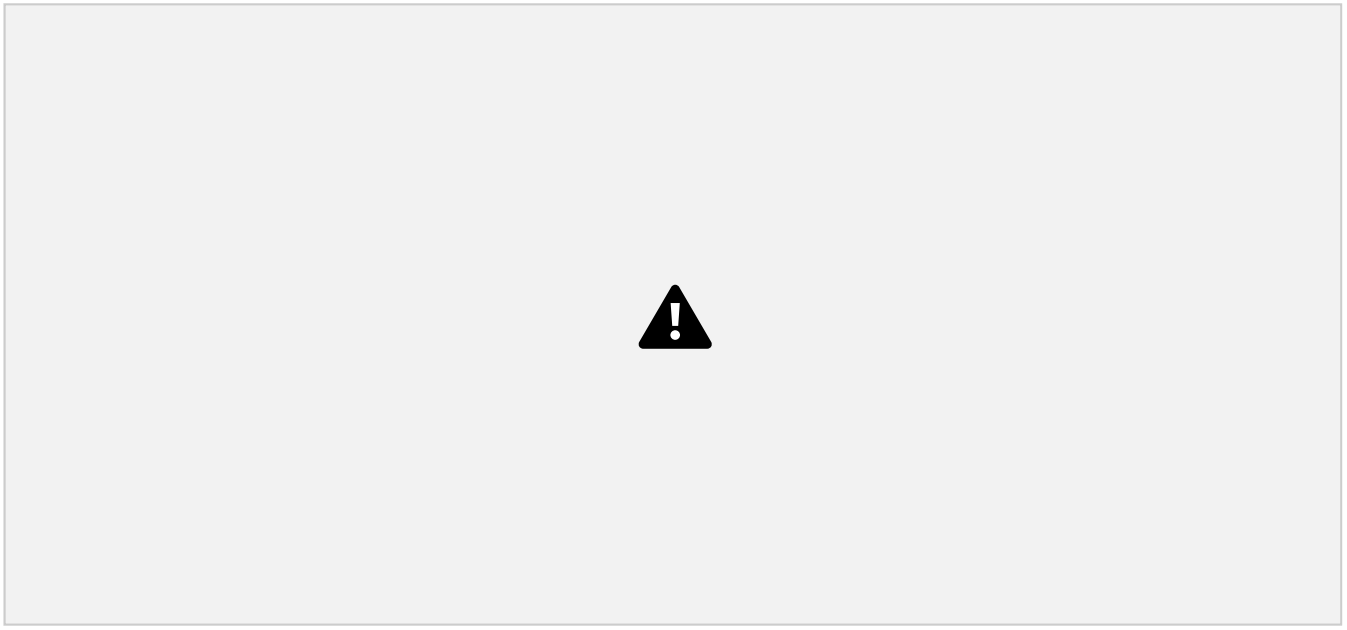
- From right most corner of our application we can click on profile icon to get redirect to profile section.
- Here we can update our information.
- Default profile is already present which can be updated later on.

Team



- Here we view all our team members working on the chosen project.
- Here we can add additional members on project. But the only condition is that they must be registered on the platform.

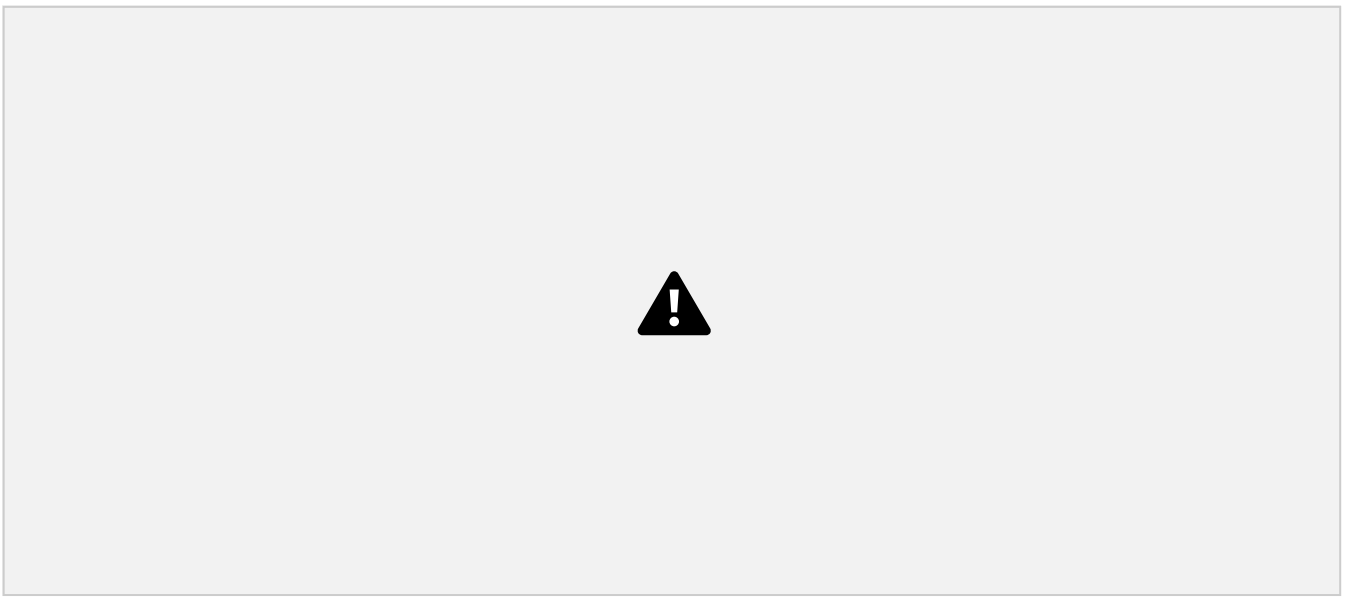
Messages



- To send mail, this functionality is provided.
- We are using Mailtrap stmp service for demonstration and experimental purposes which can be further applied to google.

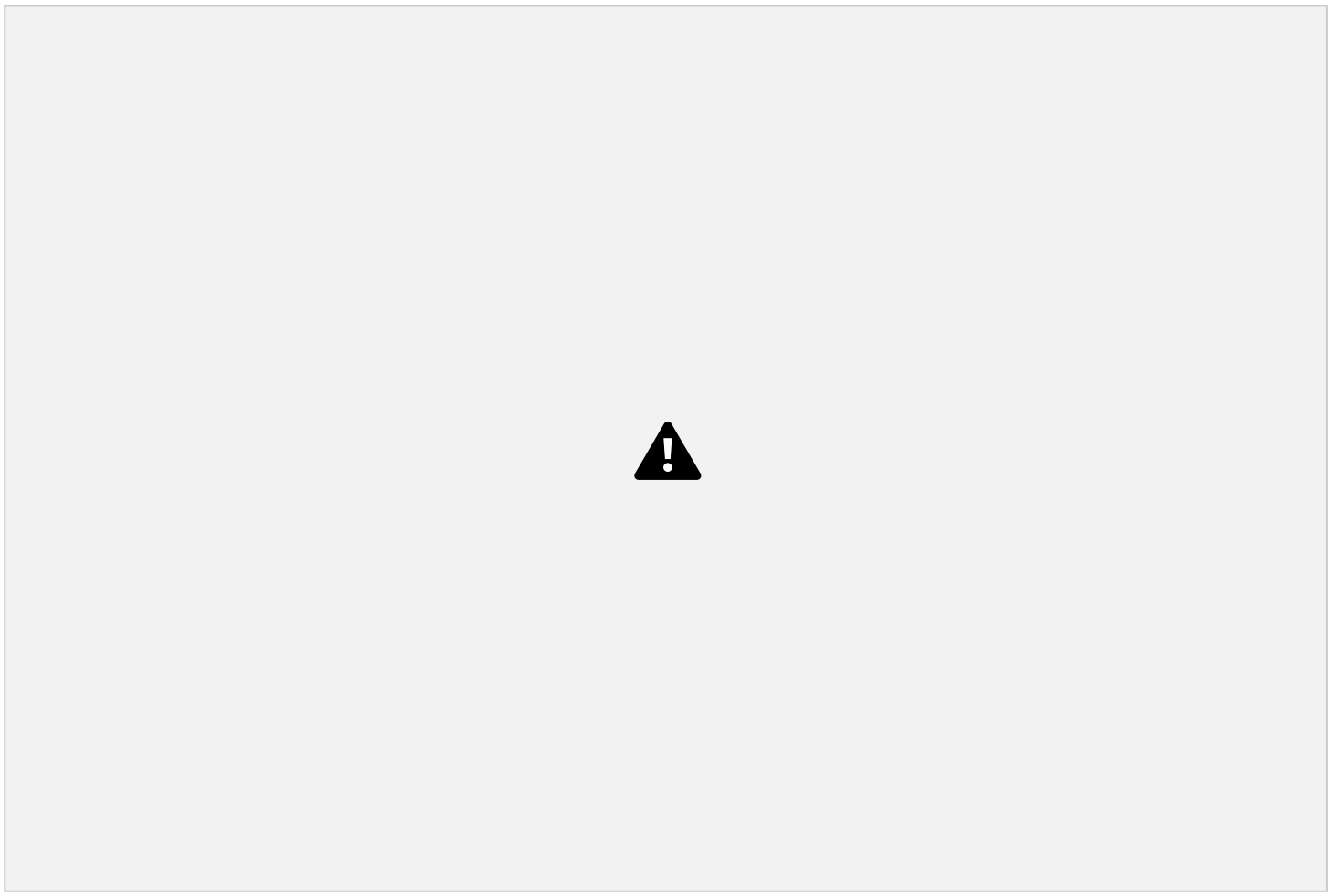
- The message will be send by a dedicated account made for this particular application.

Invite Members

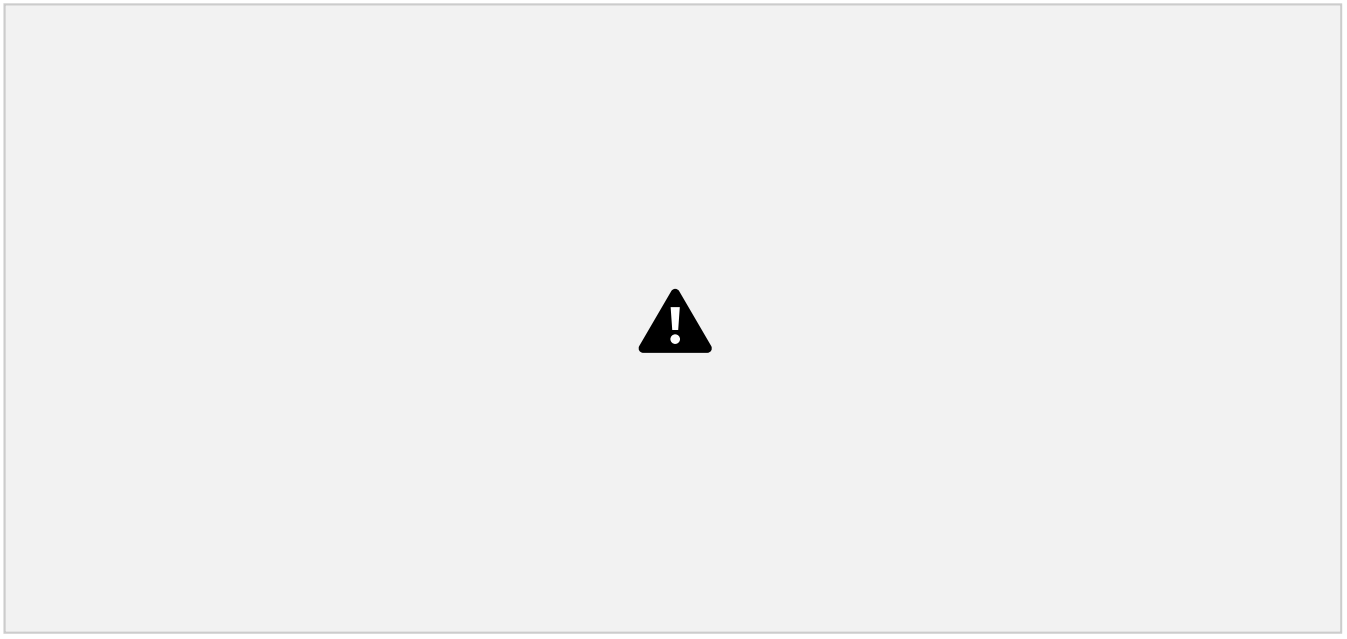


- To invite others to this service we have added this functionality

- On sending a invite to some user it sends a HTML invite to this application. Which leads to nowhere currently because this application has yet to be deployed. It looks as follow:



Logout



- In down right corner there is logout option.

- Log out option will clear our session and we will be redirected to sign in page

FUTURE ENHANCEMENTS

- Web service layer can be added in between existing business layer and application layer. This will facilitate the alerts to individual user on their headsets.

- The new layer will also allow other system running on different platforms to access the features of this system

- Chat rooms can also be created that will allow the team members to discuss on their project related works.