# WORKING TOGETHER EVENT

Project work of Advance Management of Data

TECHNISCHE UNIVERSITÄT
CHEMNITZ


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# Abstract

The purpose of this study is to fulfil the Advance Management of Data Project requirements. It is an Advance management of data project of Technische Universität Chemnitz for master student of web engineering. Due to Covid-19 everywhere in the world, many works are being done digitally. So, our project topic is Work Together Meeting which is especially created focusing on students. It is a simple meeting related web system, where students are allowed to join and withdraw the meetings. Meeting systems that are capable of delivering encouraging results should have a consistent goal, participation in decision-making and feedback to objectives in improving organizational productivity. The author also reviews and provides an understanding of Work Together Meeting system.

# Introduction

Meetings are a form of formal communication done in a society or organization that aims to achieve a decision or to resolve any issues arising. It is an important agenda or element in an organization or implementing committee in ensuring the smooth running of any work, project or management to align with the goals and objectives of the assignment within the organization. Meetings are also a medium in which information, proliferation, and sharing of ideas, instructions, and orders are received from those who lead a team and their subordinates.

Work Together Meeting is web-based application which helps students to attend the meeting. In this system there are **two users** with different role. **FSR: IF** plays admin role who can list all available meetings to get an overview, add a new meeting, change attribute of a meeting including the option to change the visibility of a meeting and remove a meeting along with all related information (especially all corresponding study groups). Whereas **Student** can create a new study group, change attribute if own study group (only if he/she is a group owner), join study group and can leave the currently joined study group.

# Task Descriptions

| **Name** | **Task Distribution** |
|---|---|
| Soman Pradhan | Handle **FRS: IF** user<br>Relational schema<br>Back-end |
| Hemanta Lo | Handle **Student** user<br>UML<br>Front-end |
| Soman and Hemanta | Documentation |

## Scope of the Project

The objective of this application is to develop a system that effectively manages all the data related to the various meetings. The purpose is to maintain a centralized database of all event related information. The goal is to support various functions and processes necessary to manage the data efficiently.

## Existing System

This existing system is not providing secure registration and profile management of all the users properly. This system is not providing on-line help. This system doesn't provide tracking of user's activities and their progress. This manual system gives us very less security for saving data and some data may be lost due to mis-management. This system is not providing proper events information. The system is giving manual information through the event management executer.

## Feasibility Study

A feasibility study is a high-level capsule version of the entire System analysis and Design Process. The study begins by classifying the problem definition. Feasibility is to determine if it's worth doing. Once an acceptance problem definition has been generated, the analyst develops a logical model of the system. A search for alternatives is analysed carefully. There are 3 parts in feasibility study.

- **Operational Feasibility:**

Operational feasibility is the measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. The operational feasibility assessment focuses on the degree to which the proposed development projects fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture and existing business processes. To ensure success, desired operational outcomes must be imparted during design and development. These include such design-dependent parameters as reliability, maintainability, supportability, usability, producibility, disposability, sustainability, affordability and others. These parameters

are required to be considered at the early stages of design if desired operational behaviors are to be realized. A system design and development require appropriate and timely application of engineering and management efforts to meet the previously mentioned parameters. A system may serve its intended purpose most effectively when its technical and operating characteristics are engineered into the design. Therefore, operational feasibility is a critical aspect of systems engineering that needs to be an integral part of the early design phases.

- **Technical Feasibility:**

This involves questions such as whether the technology needed for the system exists, how difficult it will be to build, and whether the firm has enough experience using that technology. The assessment is based on outline design of system requirements in terms of input, processes, output, fields, programs and procedures. This can be qualified in terms of volume of data, trends, frequency of updating in order to give an introduction to the technical system. The technical feasibility assessment is focused on gaining an understanding of the present technical resources of the organization and their applicability to the expected needs of the proposed system. It is an evaluation of the hardware and software and how it meets the need of the proposed system.

- **Economical Feasibility:**

Establishing the cost-effectiveness of the proposed system i.e., if the benefits do not outweigh the costs, then it is not worth going ahead. In the fast-paced world today there is a great need of online social networking facilities. Thus, the benefits of this project in the current scenario make it economically feasible. The purpose of the economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide. It includes quantification and identification of all the benefits expected. This assessment typically involves a cost/benefits analysis.

# Requirement Analysis

Requirement Analysis, also known as Requirement Engineering, is the process of defining user expectations for a new software being built or modified. In software engineering, it is sometimes referred to loosely by names such as requirements gathering or requirements capturing. Requirement's analysis encompasses those tasks that go into determining the needs or conditions to meet for a new or altered product or project, taking account of the possibly conflicting requirements of the various stakeholders, analysing, documenting, validating and managing software or system requirements. There are some software requirements of this system, which are mention below:

## Software Requirements:

- Operating System **:** Windows, Linux, Mac
- Internet connection **:** Existing telephone lines, Data card.
- Browser **:** Google chrome, Mozilla Firefox
- Database **:** PostgreSQL
- Performance **:** The turn-around time of the project will be medium.
- Documentation **:** MS-Office
- Framework **:** Flask
- Programming **:** Python

# Proposed System

Working Together Event is the system that serves the functionality of an event manager. The system allows a student to register in to the system, and also for new user to register on the application. This is a web-based system which facilitate different features for student in order to attend the meeting. The project provides most of the basic functionality for a meeting. It allows the user to select from a list of different meetings. Once the student is log in to the system, he/she can create a new meeting and also can view the list of students, who are enrolled in that particular meeting. Student are allowed to enrol and update the meeting only if they are meeting owner. We have used PostgreSQL for database, all the logic are created in PostgreSQL. Once, student enrolled into the meeting, the meeting owner can view that particular student and also can update the meeting. The system shows the location of meetings, so that student can go and easily attend the meetings.

## Advantages:

- It helps the student who wants to attend the meetings.
- It is simple and easy to use.
- This system is effective and saves time.

# Design and Architectures

## Design:

A design is a plan or specification for the construction of an object or system or for the implementation of an activity or process, or the result of that plan or specification in the form of a prototype, product or process. It is a first step in development phase for all the techniques and principle for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization. Once the software requirement has been analysed and specified the software design involves three technical activities-Design, Coding, Implementation, testing that are required to build and verify the software. The design activities are of main importance in this phase, because in this activities decision ultimately affecting the success of the software implementation and its ease of maintenance are made. This decision has the final bearing upon reliability and maintainability of a system. Design is only way to accurately transfer the customers' requirements into finished software or system. Design is the place where quality is fostered in development. Software design is the process through which requirements are translated into a representation of software. Software requirement is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data.

## Module Description

The system after careful analysis has been identified to be presented with the following modules.

- **User Module**

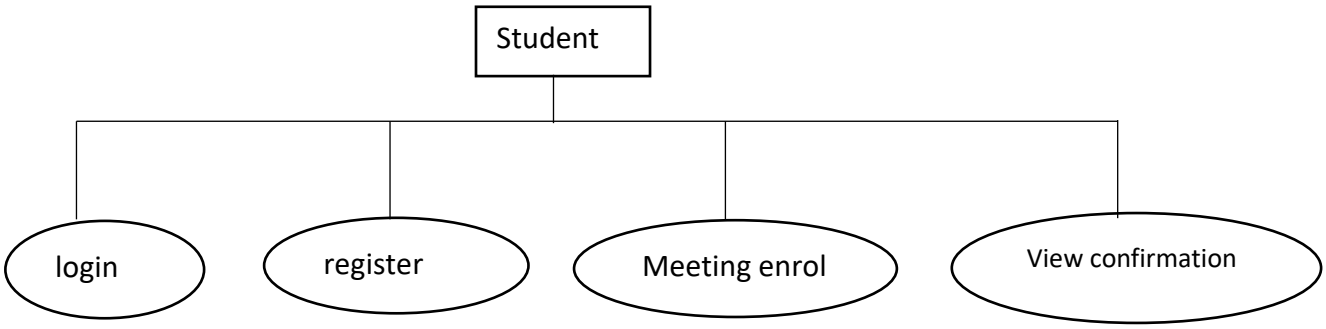
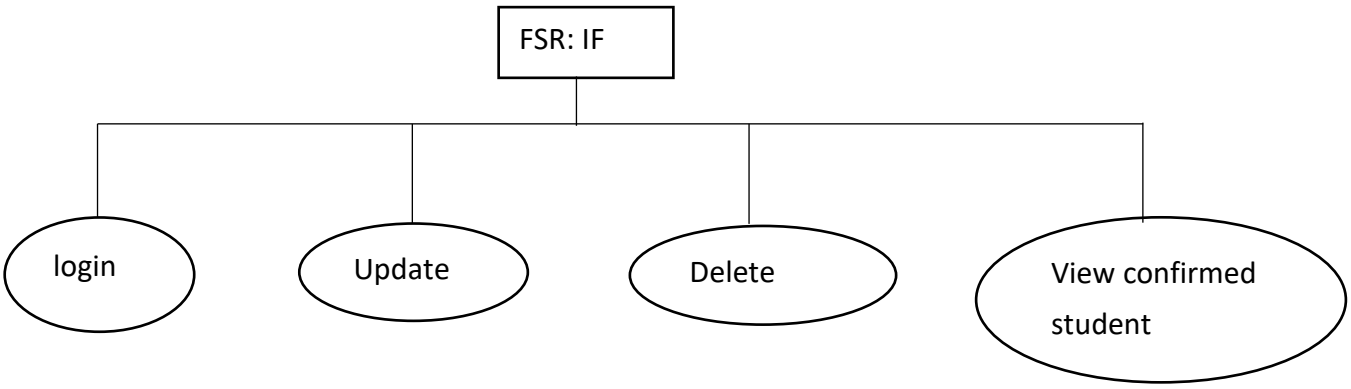


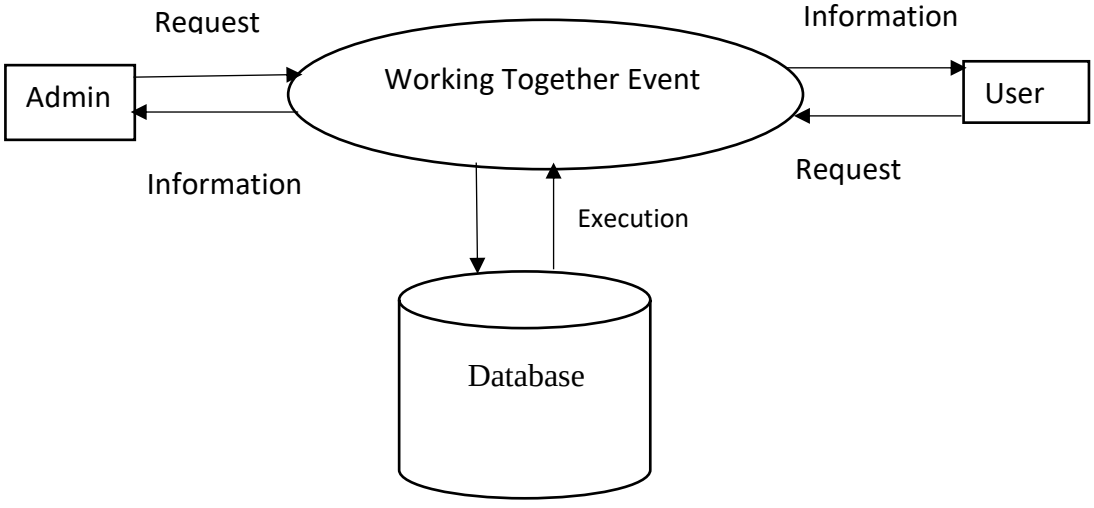

**Figure (a): User Module**

- **Administrator Module**



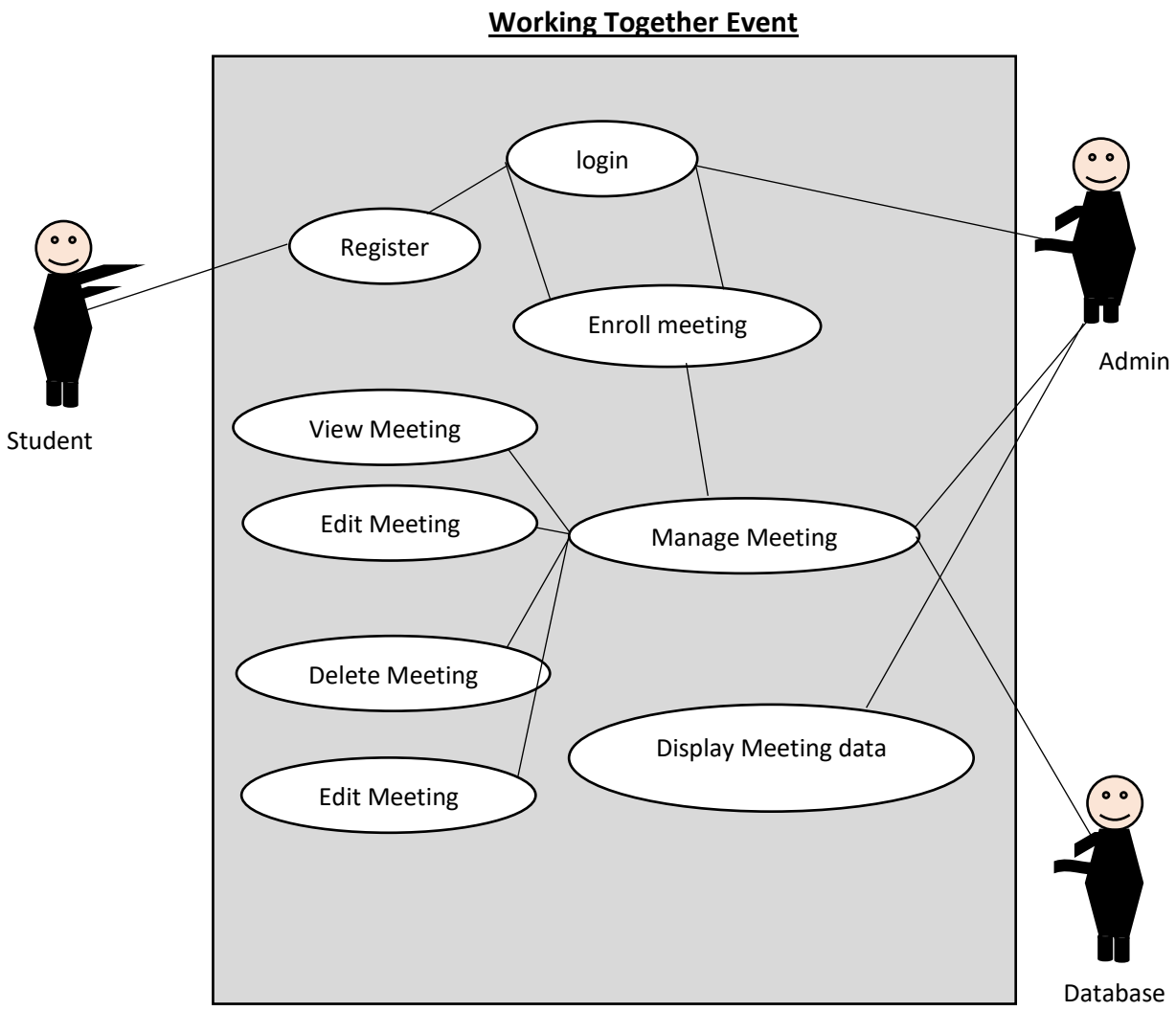

**Figure(b): Administrator Module**

## Architecture



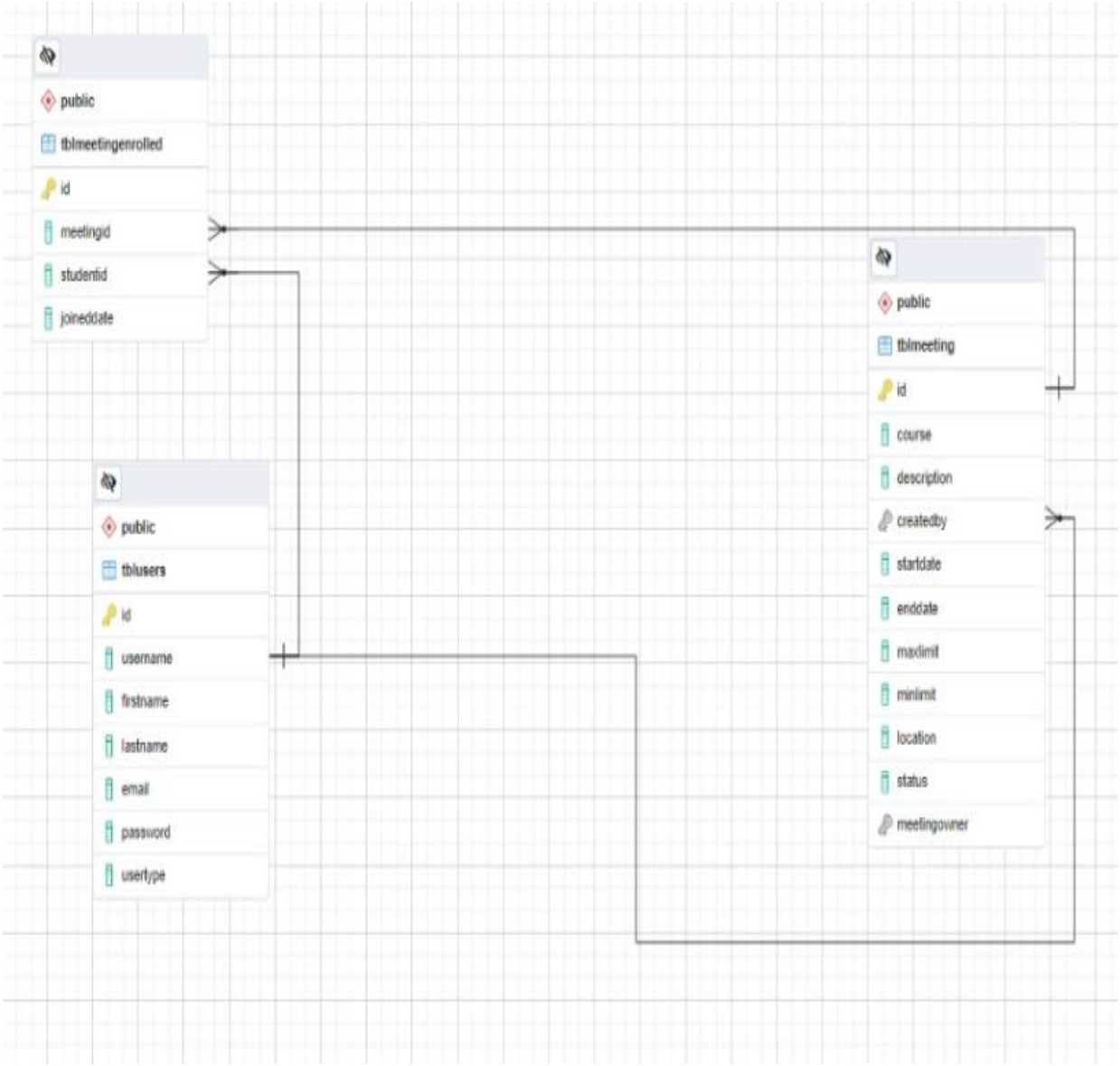

**Figure(c): Architecture of Event Management System**

# UML & Schema Diagram




**Fig(d): Use Case Diagram**

# Schema Design




**Fig(e): Relational Schema**

The above figure shows the relational schema, which is used in this project using PostgreSQL. Where we have used three tables i.e.; tblusers, tblmeeting, tblmeetingenrol.

# Gantt Chart

| Week/Days (May) Work Done | First week | | | Second Week | | | Third week | | | Fourth week | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Days | | | Days | | | Days | | | Days | | |
| System Study | | | | | | | | | | | | |
| Feasiblity Study | | | | | | | | | | | | |
| System Analysis | | | | | | | | | | | | |
| System Design | | | | | | | | | | | | |
| General Design | | | | | | | | | | | | |
| Coding | | | | | | | | | | | | |
| Testing | | | | | | | | | | | | |

We have divided the time according to division of work. For system study, Feasibility study, System analysis, System Design, general design, Coding & Testing. Within a four week, we were able to complete the project.

## Result & Discussion

After finishing the project Working Together Event, we were successful to make a system for a student, in order to attend the meeting with required functionality which was mention for the project. We get to understand Postgres has implemented some NoSQL features, but not all of them. For instance, it lacks horizontal scaling. Yet, these implementations still put Postgres in an advantage, since it can combine both — SQL and NoSQL practices. Thus, we can join NoSQL data with SQL tables. And it will work correctly. Flask framework has also played a vital role in this system, which helps us to connect the front-end part with backend database.

# Conclusion and Future Work

Work Together Meeting is web-based application which helps students to attend the meeting. In this system there are **two users** with different role. **FSR: IF** plays admin role who can list all available meetings to get an overview, add a new meeting, change attribute of a meeting including the option to change the visibility of a meeting and remove a meeting along with all related information (especially all corresponding study groups). Whereas **Student** can create a new study group, change attribute if own study group (only if he/she is a group owner), join study group and can leave the currently joined study group. However, inorder to attend the meeting student has to go to the particular locations, which is mentions in a meeting while creating it. We have planned to make it online system in future, so that student can easily attend the meeting.

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