

CSE2004 Database Management Systems

J Component - Project Report

SaneTime - A Students Time Management app

By

18bce1281 Saswat Panda
18bce1133 Divyansh Jain

B.Tech CSE

Submitted to

Dr.Pradeep K V,
Assistant Professor,
SCOPE, VIT, Chennai

School of Computer Science and Engineering



VIT[®]
Vellore Institute of Technology
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ABSTRACT

In this competitive world time plays a key role to keep you ahead of others. So, managing time efficiently is very important to survive as well as to achieve your goal. Not only this but also if you manage your time efficiently you feel satisfied at the end of the day. Since android apps have increasing popularity these days, In this project we develop an android app that will primarily focus on managing time of a student.

TABLE OF CONTENTS

1	Introduction	1
1.1	Objective and goal of the project	1
1.2	Problem Statement	2
1.3	Motivation	3
1.4	Challenges	1
2	Literature Survey	1
3	Requirements Specification	7
3.1	Hardware Requirements	8
3.2	Software Requirements	9
4	Database Structure	
5	Implementation	
6	App Description	
7	References	

1. Introduction

1.1 Objective and goal of the project

In today's competitive environment, time is crucial for staying ahead of the competition. So, in order to thrive and achieve your goals, you must effectively manage your time. Not only that, but if you effectively manage your time, you will feel satisfied at the end of the day. Because android apps are becoming increasingly popular, we will create an android app for this project that will largely focus on student time management.

1.2 Problem Statement

Our problem statement is developing a user friendly android app that will help the students to manage their time comfortably and get academic success.

1.3 Motivation

Time management is one of the most important factor that is ignored by most of the students, and later they feel depressed that they are not intelligent enough. So, we decided to build an app that will help the students manage their time well and make them confident.

1.4 Challenges

Since, our team is working remotely it will be difficult for us to have a common codebase. To overcome it we are planning to use GitHub. Also, we might not test several volunteers to test the apps efficiency properly.

2. Literature Survey

There have been various research on Time Management, Automated Time Manager (ATM), a smartphone application, was developed to give users with visualisations of their physical activities and phone usage statistics, as well as to collect smartphone sensor and usage data[1]. Setting realistic objectives, prioritising, and maximising planning are among the tactics recommended by the editorial board of the Western

Journal of Nursing Research to improve time management. Maintaining focus on a research programme can be made easier by including a team, overcoming obstacles, and addressing any distractions early on[2]. Another study discovered that students' perceived control of time was a key factor that connected with cumulative grade point average[3]. In a separate study, data was collected from Qurtuba University of Science and Technology students in order to determine how well they manage their time in order to meet their academic goals[4]. Another study discovered that students' time management behaviours are significantly positively associated to their academic achievement, however the link is weak. The most significant correlated predictor is time planning[5].

3. Requirements Specification

3.1 Hardware Requirements

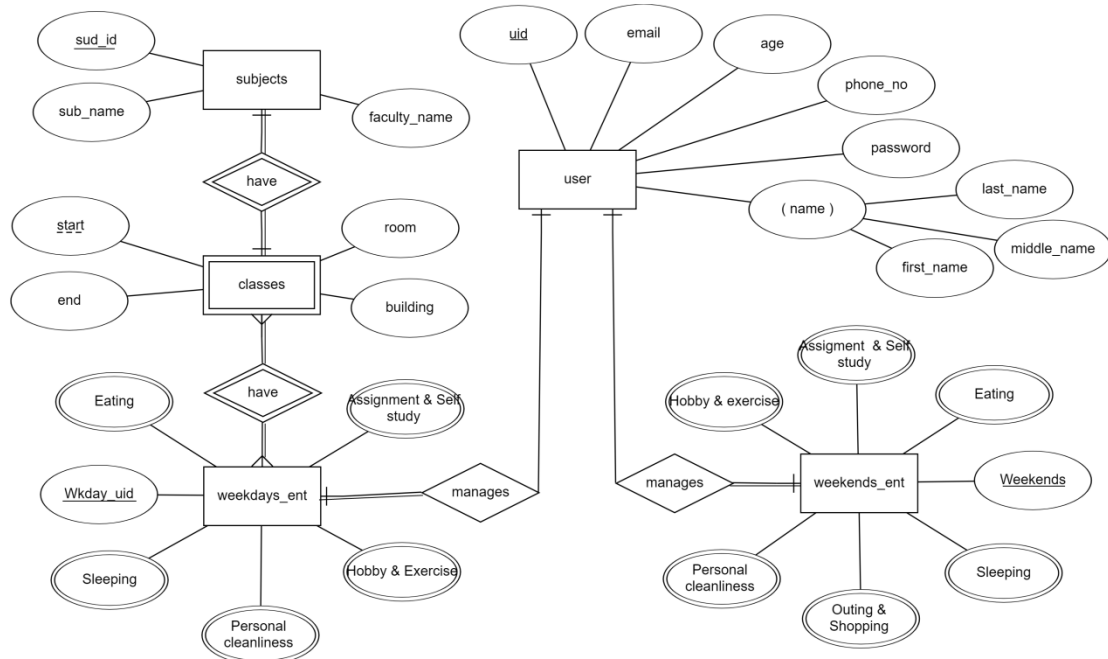
The hardware requirements are as follows:-

- x86_64 CPU architecture;
- 2nd generation Intel Core or newer, or AMD CPU with support for a Windows Hypervisor.
- 8 GB RAM or more.
- 8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)
- 1280 x 800 minimum screen resolution.

3.2 Software Requirements

A proper installation of android studio will be fine to build an android app. I will have support for java, kotlin and xml. As we will be using java instead of kotlin we will also need to install jdk.

4. Database Structure



Above diagram represents the entity relationship diagram(ER Diagram) for our project Sane Time. In this section we will discuss how the database structure is using the entity relationship model. The reason for using the ER Model for describing the database structures are:- It will assist you in defining words associated with entity relationship modelling, give a glimpse of how all of your tables should relate, as well as which fields will be on each table, It aids in the description of entities, properties, and relationships, ER diagrams may be converted to relational tables, allowing you to quickly create databases, Database designers can utilize ER diagrams as a roadmap for integrating data into specific software applications, With the help of an ERP diagram, the database designer acquires a better knowledge of the information that will be stored in the database, The ERD Diagram lets you to communicate with users about the database's logical structure.

Now, let us discuss the various symbols used in the above ER Diagram. Entity types are represented by rectangles in this Entity Relationship Diagram symbol. Ellipses are a type of ellipsis. Attributes are represented using symbols. Diamonds: This symbol signifies various forms of relationships. It connects characteristics to entity types and entity types to other relationship types using lines. The primary key is that the properties are highlighted. Multi-valued qualities are represented by double ellipses. Users manages both weekends and weekdays on a 1 on 1 relationship. But, weekdays have classes, the classes have subjects, and these relationship are many to many relationship, one class can be on many weekdays and one weekday can have many classes and similarly for classes and subjects.

5. Implementation

The screenshot displays the Android Studio interface. On the left, the 'Project' view shows the package structure with 'DatabaseHelper' highlighted. The main editor shows the 'DatabaseHelper.java' file with the following SQL statements:

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Our application will store your data in safe and structured manner using sqlite3. We have used various database operations like join, insert, update, delete etc. in order to ensure comfort while using our app. We have also included constraints in email, mobile, age and time to ensure that correct data is being entered. If you are running an institution and want to partner with us then we can make you the admin by which you can monitor activities of users registered in your database. In order to use our app

- 1)First you have to register providing all your details.
- 2)Give your email id and get your UID.
- 3)Enter all your classes and subjects.
- 4)Enter all your basic activities and co-curricular activities.
- 5)Then click on a particular date to find your schedule.

Below are some screenshots of the app.

sane_time

UID

password

LOGIN

New?click here to register

Click here to view/update your infomation

sane_time

Saswat

middlelname(optional)

Panda

21

spsaswat@gmail.com

9876543210

Registered Successfully

back to login

REGISTER

CLICK HERE TO KNOW UID

sane_time

Frequently used email

spsaswat@gmail.com

GET UID

Enjoy Our app

Id: 3

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sane_time

MONDAY

MONDAY SCHEDULE

CLASSES

COURSE NAME: Problem Solving

COURSE CODE: CSE1001-LO

STARTING TIME: 08:00

ENDING TIME: 08:50

ROOM: 601

BUILDING: ab1

EATING

TIME1: 07:00

TIME2: 12:00

TIME3: 08:30

ASSIGNMENT AND SELFSTUDY

TIME1: 07:00

TIME2: 08:00

TIME3: 09:00

TIME4: 11:00

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7. References

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