

PROJECT UMBRELLA

**A Mini-Project Report
Under
Implementation of Technology**

Submitted by

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in partial fulfillment for the award of the degree

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at

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UNIVERSITY, JUHU-VILE PARLE
APRIL 2015**

CERTIFICATE

This is to certify that the project entitled **Project Umbrella** is the bonafide work carried out by **Anas Ahmed (B006) ,Shubhi Bakliwal (B009), Shounak Patwardhan (B011), Tejaswini Vijapurapu (B014)**, B.Tech (Computer Engineering), MPSTME (NMIMS), Mumbai, during the fourth semester of the academic year 2014-2015, in fulfillment of the requirements for the award of the Degree of Bachelors of Technology as per the norms prescribed by NMIMS. The project work has been assessed and found to be satisfactory.

Examiner 1

Examiner 2

Dean
Dr. S.Y. Mhaiskar

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Date: April 2015

ACKNOWLEDGEMENT

We would like to thank our teacher, **Ms. Poonam Gupta**, for helping and guiding us throughout our venture into the world of Android. This being our first ever attempt at creating an application, we did come across hurdles and faced a lot of difficulties. She devoted an ample amount of her working time towards solving our queries and difficulties, for which we are really thankful. We would also like thank the HOD of the computer engineering department, the respected Dhirendra Mishra sir for encouragement and support. Lastly we would like to thank our Dean for making this venture possible.

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ABSTRACT

As students of the prestigious Mukesh Patel School of Technology Management and Engineering, we are part of a progressively growing system of education. Challenged by a heavy workload and an extensive syllabus, we, as students lack the existence of an interconnected portal for our academic lives.

Here comes project Umbrella, a synergism of various toolkits designed specifically for the burdened student. Project Umbrella consists of 4 separate modules, each engineered and tailored for the student body's convenience; an attendance manager to ensure that the students can track their attendance and ensure that they are well within the requirements, a dynamic timetable that can be changed as and when required, an announcement console and Marksman. The stand out component of project Umbrella, Marksman aims to better each students' collegiate goals. Built with the capability of calculating students GPA's and saving target GPA's, Marksman pushes its students to their limits and creates a healthy and competitive environment.

Looking at the bigger picture, our goal is to ensure Project Umbrella becomes an integral part of every student's academia. We aim to provide functionality, not only to our own college, but extend our features to students across India. We at Project Umbrella have a single, unilateral vision, to create an irreplaceable environment where our students can work efficiently. We believe this is key in bettering the lives of the average Indian student.

1. INTRODUCTION

1.1 Problem specification

- **Project Umbrella** is a revolutionary idea which will transform the life of all individuals related to a university.
- Within the first few days of college, we were immediately burdened with the constantly changing college schedule and the horrible CR/SR.
- There were a lot of activities happening but not all were conveyed to us in a proper and efficient manner.
- Moreover, the letters sent to our parents regarding the attendance acted like atomic bombs.
- Finally, (never) understanding the grading system required a degree of its own.

1.2 Solution Outline

- The team was determined to present a painless and intuitive way to handle
 - Attendance
 - GPA
 - Time Table
 - Announcements

In a trouble-free and straightforward manner.

1.3 Applications

- Project Umbrella's utility encompasses all aspects of a student's and faculty's college life.
- On a daily basis, Project Umbrella provides the Attendance and Timetable toolkits to help them keep up with their attendance and to see any necessary changes in their quotidian schedule.
- More frequently, the announcement tool kits helps them to keep track of the pitter-patter of both the educational and social activities.
- Finally, the MarksMan toolkit empowers students with the ability to analyze and scrutinize their grades and thereby providing them with a platform to improve and grow academically.

2. SYSTEM ANALYSIS

2.1 Existing System

- The team built upon their previous endeavor, MarksMan Beta, which provided the basic functionality to manage their grades.

2.2 Software Requirement

- Android 4.0.3 (ICS) or higher
- Internet Connectivity
- Access to Google APIs

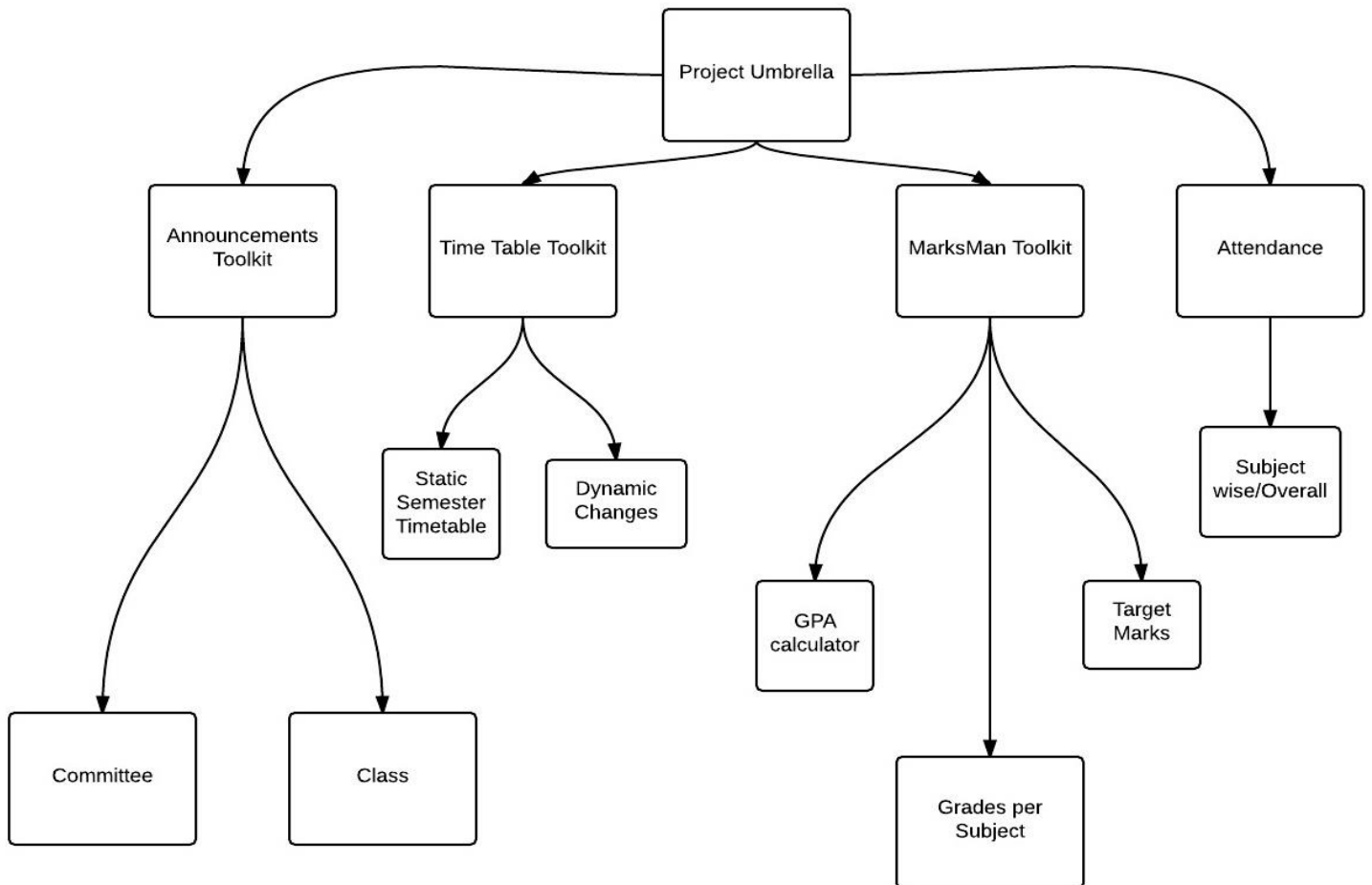
2.3 Hardware Requirement

- Resolution – WXVGA to 4K
- Minimum 512 MB RAM
- WiFi/GSM/HSPA/LTE connectivity

The team took care to keep the Hardware/Software requirements minimum so as to reach a wider crowd.

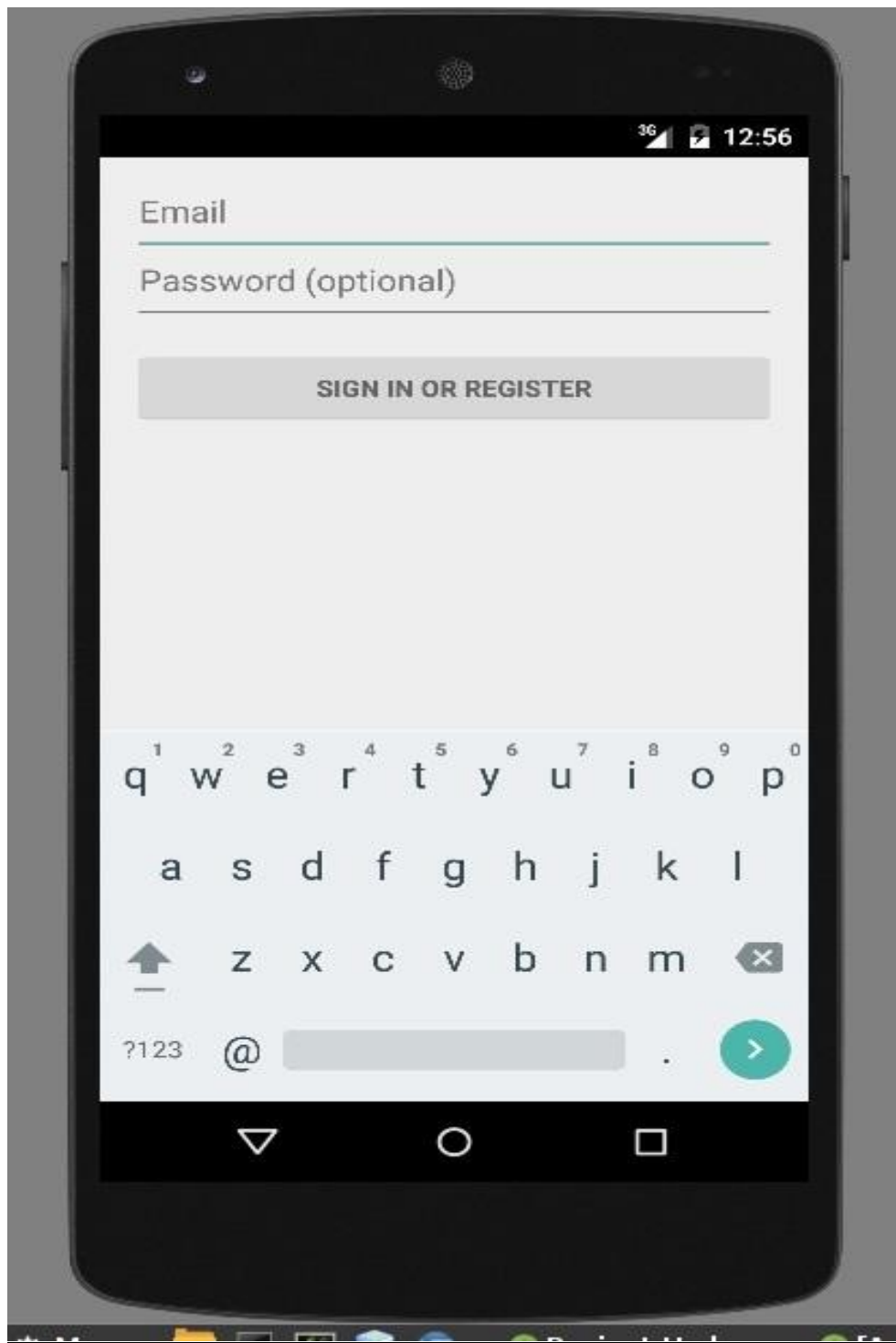
3. DESIGN AND METHODOLOGY

3.1 Flowchart of App

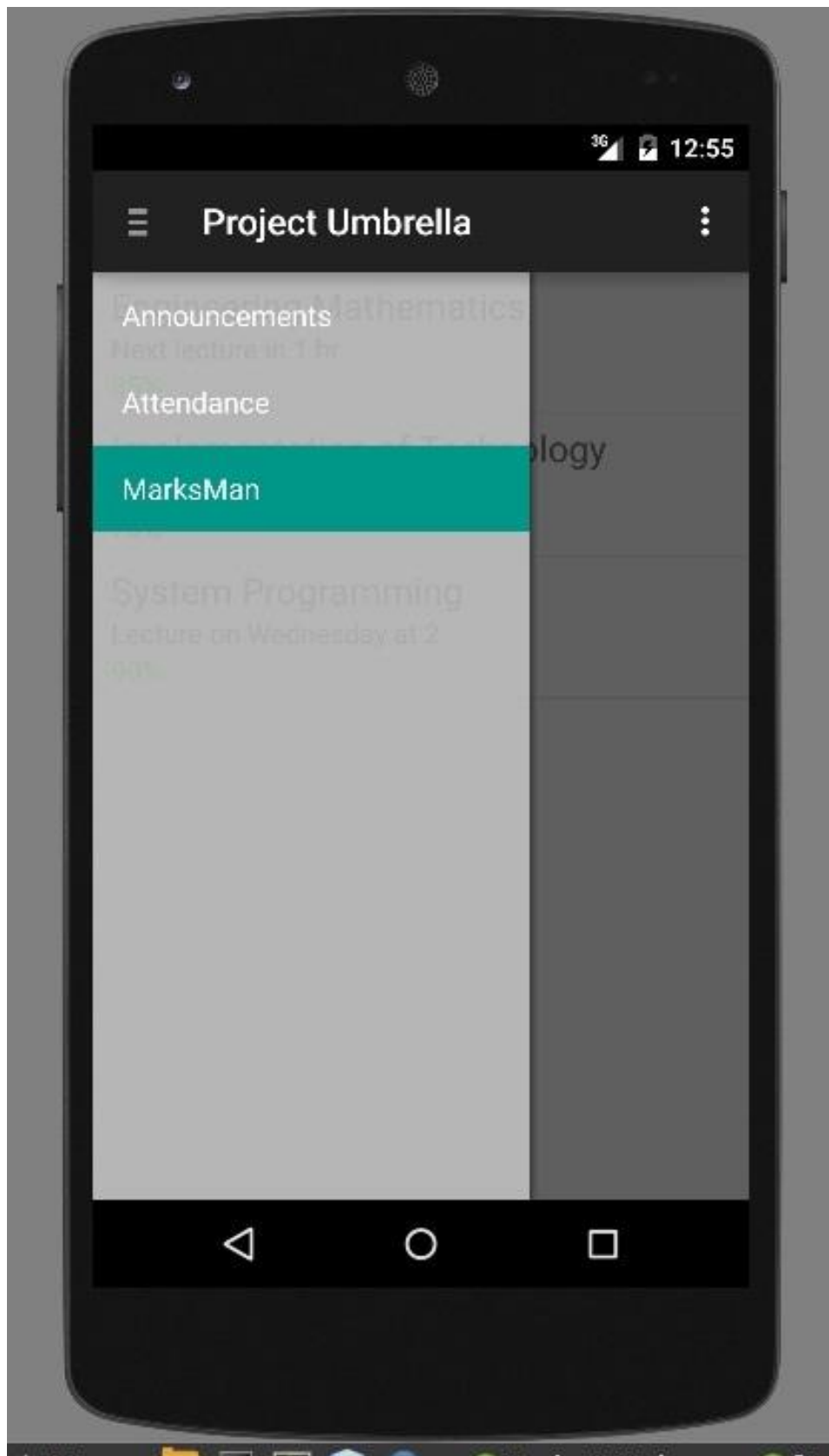


3.2 Output

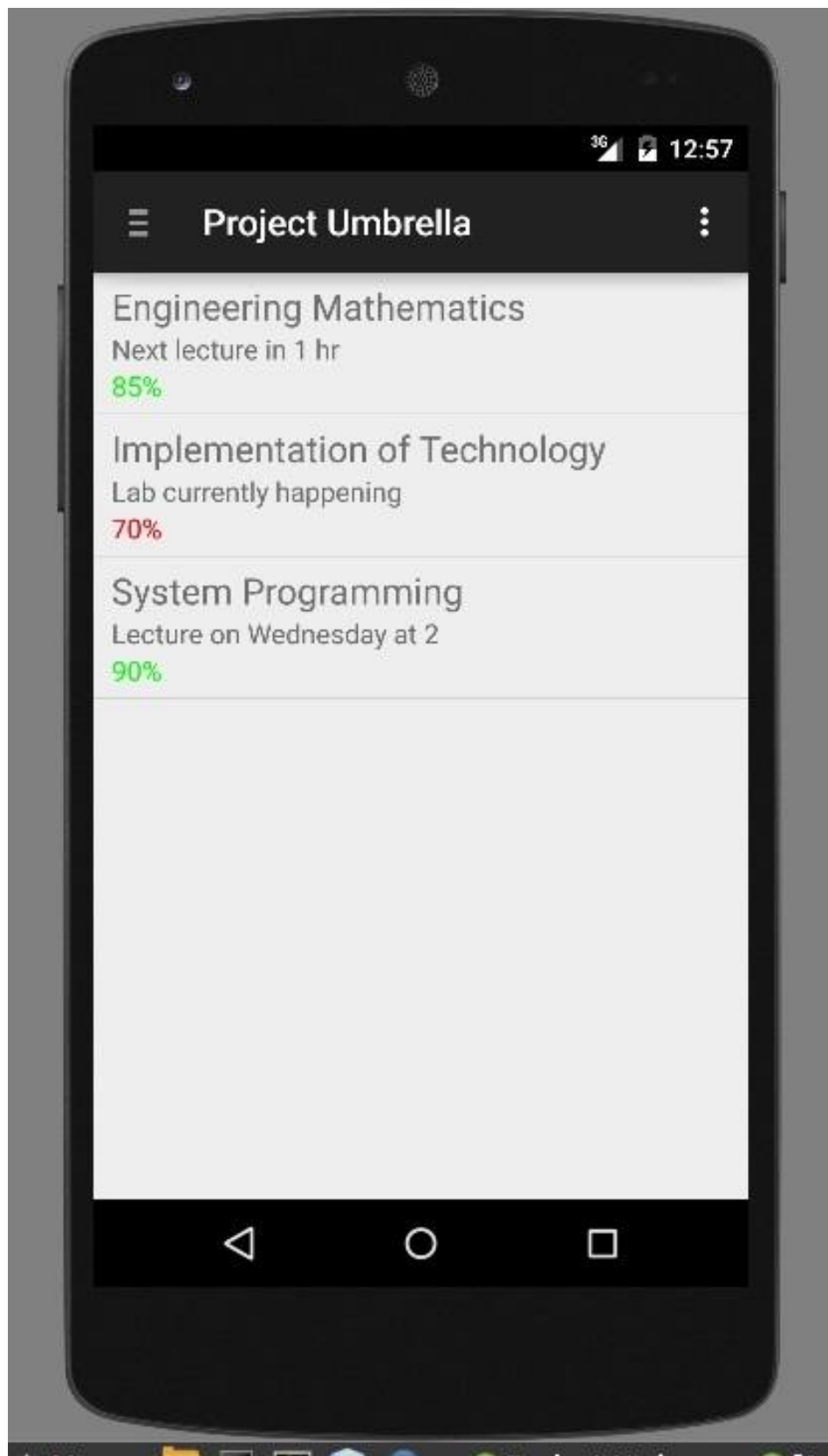
3.2.1 Registration Page



3.2.2 Navigation Drawer



3.2.3 MarksMan



3.2.4 Subject Description

Engineering Mathematics

Test 1

Test 2

Assignment Grade

Lab Grade

Viva Grade

3.3 Limitations of App

- Statically fed time table required
- Intermittent server side issues
- Limited functionality available as of now
- Currently restricted to MPSTME students
 - Each university has their own method of calculating grades, keeping attendance, etc., Due to the static implementation that cannot be taken care of presently.

3.4 Functionality

Two modules of project Umbrella are currently in play, the attendance manager and marksman (grades manager). The attendance manager is set to handle the upcoming semester's subjects and stores the number of hours attended for each of the same. Furthermore it gives the student the percentage of his/her attendance based on the number of hours he/she has attended of the lecture conducted. This percentage changes dynamically as the hours increase.

The marksman module requires the student to enter his internal marks and it calculates his required marks in the external examinations based on 2 modes, pass and target. The pass mode computes the marks required to pass in a particular subject and target setting gives us the marks required to achieve a target GPA, which must be inputted by the student.

4. CONCLUSION AND FUTURE SCOPE

To conclude, we learnt android development using Java and created an application. As mentioned above, a few concerns constrained us from expanding the application to the intended scale. Currently, only students of MPSTME can use the application, that too to a limited extent. We aim to develop Umberella to an extent so as to enable all college students to use it in everyday life. We aim to allocate timetables dynamically and update announcements in the announcement console at a higher rate.

'For everything that could have been, well at least we took the ride...

There's no relief in bitterness, may as well let it die...'

5. REFERENCES

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