

Individual Project Proposal Template

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Subject: CCTE Organization System Management to compile Organization's need in one web application fostering student/officers involvement, trust and team work for healthier and fun environment and department relationships.

Project Title: COSyM: One System, Multiple Functionalities

Project Overview

The project is all about unifying students and officials' relationships. As a student of the CCTE Department, and based on my observations, some students may have a vague understanding about what is happening inside the events, how it is handled, and about the works of the officers. Some students may wonder where the funds are, and may encounter other things about how well the events are handled and how enjoyable it is.

As a student, I wanted to address this situation and make a clearer possible solution to unite officers and students leading to more organized events, activities enjoyable for both students and admins, justified/reasonable funds where students/officers can both have agreement and justifications, and lastly, to appreciate the hard work of officers as I observed their efforts are sometimes not that credited and seen.

I hope that by presenting this system, students and officers can communicate freely without discrimination, giving feedback to each other and further developing bonds and freedom leading to more creative and enjoyable events that can benefit the Department socially, emotionally, and physically as well as minimizing stress, emotional and physical toll in our Officers and admins.

Scope and limitations

The project will only include features to compile the organization's event handling and student engagement within the organization.

- It will include necessary features such as home dashboard, events calendar, fund monitoring, login/signup features and freedom wall.
- I implemented uploading of documents and folder handlings for posting and storing data but it will still be lacking if they need more flexible options as there are more efficient ways of doing it such as google drive.
- The system can be used as a social media for communicating with officers and admins publicly using the freedom wall or event suggestions.
- Using Html link and not c# web application or exe file, students can easily access the website reducing friction because of low effort and more reliable platform as a desktop application can be disregarded as they can think of it as a virus.

Objective

- **For Students:** Clarity on event processes leading to fewer misunderstandings.
- Empowerment to influence activities for higher engagement.
- **For Officers:** Public appreciation for morale boost and Streamlined feedback for less redundant work.
- **For Department:** Stronger community bonds leading to more successful, student-driven events.
- Reduced conflicts for a healthier academic environment.

System Design

Front end:

HTML/CSS for front end designing

Backend:

Firebase(for authentication, firestore and storing documents)

Features:

Login and Signup User Authentication - Role based access of Admins/Students

Funds Tracker - firestore collection of funds every event date for every year of college students and course

Event calendar - Posting of event flow and suggestions, ratings and giving credits to the organizers/Officers

Freedom wall - school suggestions, event suggestions, activities suggestions.

Home page - Displaying overall rating and organization updates.

Data Structures:

Users collection - name, email, role,status, year, course

Funds - year and course categorization of funds, total, course, pending unpaid, targeted funds that is automatically calculated

Documents in events - Saving and posting files including documentation, preparation and liquidations.

Using vectors and queue - for flexible data handling and manipulating including the making of chat boxes.

Collection and processing of stars - Should be implemented automatically every event and overall in the home page.

Algorithms:

Role-based user interface - Admin buttons can't be used by students

Real-Time Update - Using firestore onSnapshot for funds and calendar as well as for public chat

Expected Outcomes

- Uses CCTE Department themed Functional Web application for more appealing UI and firebase hosting
- All features are working and is enjoyable to use
- Minimize bugs
- CCTE department usage of the program for keeping in touch with the students
- Foster trust within organizations and students by having clearer financial and event transparency
- Get more student engagement by listening to student suggestions at every event.
- Appreciate, recognize and reduce stress for officers by having an organized work flow.
- Streamlining events by having calendars being able to plan more efficiently with student's suggestions.
- Recognizing contributions by having public appreciation system and officer contributions spotlight

Implementation Plan and Timeline

The project will be completed in 6 weeks:

1st week - GUI's, Completion of front end design, Login and Sign up Function

March 30 - April 1 - Must be able to finish the finalization of Graphic User interface of both Admins/Officers and Students

- **Day 1-** including, designing of Login, Signup, and features such as the Home page rating meter, events calendar.
- **Day 2-** Finalize GUI's of , posting of files, Funds, Documentation and reviews.
- **Day 3 -** Spare day for Finalization, polishing and rest day.

April 2- 4 - Designing Front end of the website using HTML and CSS.

- **Day 4-** Find more ways to make coding efficient such as finding css templates for base designing and molding it to the original GUI.
- **Day 5-** Log in/Sign up connection to firebase database authentication and fire store using JavaScript. Must be able to make Admin and Student accounts.
- **Day 6 -** Polish, testing and streamlining of codes securing right and stable maneuvering.

Week 2 - Making Profile Profile and Funds function usage GUI Application and back end

April 5 - 7 - Making database for profiling admin/student

- **Day 1 -** After logging in, users should be able to edit their name, address, course, and year and the data will be linked and stored in firebase.
- **Day 2 -** Implementation of feature where you can see officers and students, students and admins should be able to search certain course, year and also name
- **Day 3 -** Polishing, making sure everything is connected, debugging and cleaning of code

April 8 - 10 - Funds tracker, Admin can Edit and Students can only view. function usage GUI Application and back end

- **Day 4 -** Successful display of funds from 1st to 4th year including completed funds, targeted amount, unpaid amount and who's complete or incomplete and firebase bindings for databases.
- **Day 5 -** Implement Admin editing and saving so that admins can save files such as pictures for a certain date or event.
- **Day 6 -** Ensure everything is connected and working, testing using admin and student account, debug and clean codes.

Week 3: Date and events tracker, posting of events and program flows, suggestions, and viewing of documentation/liquidation

April 11 - 13 - Date and events tracker, posting of events in certain events and opening anonymous suggestions

- **Day 1 -** Successful display of dates including year, month and day and events within specific dates and ensuring admin can make a post on that specific date with an open comment section.
- **Day 2 -** Implement student actions so that they can comment and post reactions, suggestions and agree upon the said activities.
- **Day 3 -** Ensure everything is connected and working, testing using admin and student account, debug and clean codes. Spare time to fix bugs.

April 14 - 16 - Documentation viewing

- **Day 4** - Posting of files that contains information that can be publicly displayed by the admins including the officers contribution, documentation and liquidation of every event.
- **Day 5** - make sure the student commenting and reacting works also for rating
- **Day 6** - Ensure everything is connected and working, testing using admin and student account, debug and clean codes. Spare time to fix bugs.

Week 4: Freedom wall

April 17 - 19 - Open reviews and suggestion space, open for all without discrimination posted everyday.

- **Day 1** - Successful display of updated day on when did you comment, freely upload files and photos in public comment using firebase, html and javascript, Create a 5 star rating system using javascript.
- **Day 2** - Make a homepage where the overall star rating of the CCTE organization is posted and where admins can also post updates.
- **Day 3** - Make sure everything is connected, clean, and streamline codes.

Week 5: Completion and Launching

April 20 - 21 - Double check everything, data accuracy , security measures and finalizing role based UI such as admin controls can't be used by students

- **Day 4** - Run the code using student, admin and check if everything is working as intended
- **Day 5** - There should be no loopholes, lag or slow performance and bugs.
- **Day 6** - Make sure everything is connected, clean, and streamline codes.

April 22 - 24 - Testing

- **Day 1** - I would like to survey the users such as students, and officers to test if it'll provide satisfaction of usage, is it worth using and find out what can I improve.
- **Day 2** - Implement improvements.
- **Day 3** - Clean codes and make sure everything is working as intended.

Week 6: Implementation

April 25- 30

- **Day 1** - Write admin manual and student manual, guidelines and rules.
- **Day 2** - optimize load speed
- **Day 3 - 6** - Survey Accessibility, Engagement, speed, and usefulness

Evaluation

The project could be evaluated using the following:

- **Interview**- asking officers about the efficiency of the system and their needs enabling them to do things they actually needed making it simpler, efficient and effective.
- **Testing and Accessibility** - at least 50 Students and officers should be able to easily access the web application system and participate within seconds of opening and do tasks with minimized delay in the first 3 weeks of launching the system.
- **Expert review** - Consulting at least 2 professional web developers about the effectiveness of the said system through testing using social applications such as facebook, discord, linked in.
- **Speed** - must be responsive within 1-4 seconds with minimized delay and display real time updated data.
- **Engagement** - Should be used by officers and students including their satisfaction using it.

