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| Module Code: PUSL2021 | Module Name: Computing Group Project | |
| Coursework Title:  System Proposal for Computing Group Project | | |
| Deadline Date: 25/10/2023 | | Member of staff responsible for coursework:  Mr. Pramudya H Thilakaratne |
| Programme: BSc (Hons) Computer Science | | |
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| **Overall mark \_\_\_\_\_% Assessors Initials \_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_** | | |

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****Project Overview****

Collaborative management apps are popular among a lot of people, especially software developers. People use these apps to divide tasks, keep track of said tasks and share resources with each other. There are various project management software like Asana, ClickUp, Smartsheet etc. These software are more suitable for big projects like developing software or making a budget plan. What if we need a simple application which can help us complete a small task like planning a birthday party?

“FunCollab” is a mobile app that lets you collaborate with your friends in planning smaller events in a more simple and enjoyable way. The app features a two-dimensional game which has different assets like, buildings and houses available for tasks to be assigned to them and multiple players completing them to finish the building and earn points. These points can then be used to purchase more assets and extras from the in-game store. The video game is the main focus screen of the app. There is also a group chat feature where the planning committee can discuss their work together. Many people can be responsible for one task and after completion they are able to help others with their tasks as well. The main focus of this app is to make sure that the users have a fun time managing their tasks and not view it as a tedious chore. The aesthetic of the app is carefully designed to feel more relaxed and simpler, so users will not get overwhelmed by complex charts, to-do lists, time trackers etc.

Objectives of the Project

* Simplified Event Planning
  + To make event planning accessible to a wider audience, particularly those with limited experience in complex project management tools.
* Engaging User Experience
  + To create an engaging and enjoyable user experience, encouraging active participation in event planning through game-like approach.
* Asset-Based Task Management
  + To visually represent tasks using assets, simplifying task assignment and tracking while encouraging collaboration and teamwork.
* Reward System
  + To motivate users by rewarding task completion with points and providing an in-game store for continued engagement and a sense of achievement.
* Multiplayer Collaboration
  + To promote collaboration among multiple users, enabling teamwork on event planning and ensuring the success of the event.
* Task and Progress Tracking
  + To keep users informed about the status of event planning without complex features, ensuring transparency and effective contribution to the event's success.

Target audience

This application is developed targeting distinct kinds of audiences.

* Business related organizations and marketing teams.
* Freelancers, remote workers, and other distributed teams.
* Community project teams.
* University students and other educational institutions.
* Event planners.

However, anyone above 10 years can use this application for the personal and family matters as well.

Proposed Technologies and Tools

React Native is an open-source framework developed by Facebook with a purpose of developing mobile applications using the JavaScript programming language and the react component based, open-source JS library, front end development tool. React Native brings ease to mobile application developers since React Native enables cross platform mobile application development using a singular code space. The app also uses React-native-game-engine to develop the game functionality.

Advantages of using React Native

* Efficient Performance
* Cross Platform Development in Singular Codebase
* Experience the effect of building native like apps.
* Reusability of code
* Easy Testing
* Rich UI Component Libraries
* Strong Community Support
* Live Rebuilding Feature allows Developers to see App changes in real time.

Time Plan

A screenshot of a computer

Description automatically generated

* The above Gantt chart shows the time periods we allocated to complete the project.
* Final submission needs to be done by April 21st, 2024.
* The development is expected to be done within the 3 allocated phases.