

Project Charter

Scope

The scope of this project is to design and develop a web-based application that can enhance the experience of the “Avond4Daagse” event organized by Venloop. The primary objective is to create an interactive and enjoyable experience of the elementary school children participating in the event while promoting safety, inclusivity and group collaboration.

The application will follow a Treasure Hunt-based system that combines various interactive tasks, quizzes or challenges placed at checkpoints that were decided by the Venloop groups. This application will be accessed by two user groups, the admin user group and the “Teamleader” user group. Both user groups will have access to a leaderboard that shows each team’s total points and ranks from either a daily or overall bases.

The admin user group will be able to generate a task using the provided task template with its task QR code and a team activation QR code. With a simple interface, the admin can create, edit and delete any tasks. The focus here will be having a intuitive design and straight forward to use.

For the “Teamleader” users group, they can create the squad scanning the team activation QR code with their preferred name and team members. Furthermore, they can accept tasks by scanning the task QR code and input the results of the task. The important takeaway is that the design has to be easy to understand for the adults and kids.

However, the ability to live-tracking the participants, individual participant management system and real-time traffic monitoring system are not part of the project scope at this moment. Also the arrangement of the QR code and its belonging checkpoint are also outside the control of this application. Whether the tasks were actually completed in a correct manner is a responsibility for the “teamleader” to reflect the result honestly. It could be that a participant management system be added in the future.

Success Criteria

This project will be considered complete if it meets the following criteria:

-User-Friendly Interface:

- The application must be intuitive and straightforward for children the “teamleaders” to navigate and operate
- The interface must use clear language and simple visuals suitable for elementary school children
- UI/UX design must be tested

-Quest System:

- The application must provide a structured experience with a variety of interactive tasks or challenges for the admin to create and for the kids to participate
- Tasks should be accessible by scanning QR code generated by the admin user group

-Leaderboard and Point System

- The leaderboard must accurately display each teams's total points and rankings on both a daily and overall basis
- The point system must be functional and correctly reward participants based on task completion.

-Admin Management Interface

- Admins must be able to create, edit, and delete tasks via a user-friendly interface
- The system must generate task and team activation QR codes without errors

-Accessibility:

- The application must be accessible via any kinds of smartphone that has internet connection and a camera.
- The design has to make sure that not every kids to have a phone to participate the event

-Scalability:

- The system should be capable of handling a large number of users participating simultaneously without performance issue
- The system can handle multi-threading request without performance issue

-Security:

- The application must ensure data privacy and protection for all users.