



INITIAL PLAN

Anti-Bullying Web-App for Children and Young
Adults

Author: Jake Ziegler C1846557
Supervised by: Yulia Cherdantseva
Moderated by: Martin Caminada
CM3203: One Semester Individual Project
40 CREDITS

Contents

Project Description.....	2
Project Aims and Objectives	2
Aims-	2
Objectives-	2
Desirable Objectives	3
References	7

Project Description

The Project I am developing is an Anti-Bullying android web-app. Bullying is a problem at any age, however it is prevalent in children and young adults, with it affecting more than half of people under the age of 25 (21 Facts About Bullying You Probably Never Knew. 2021).

Bullying comes in many forms, one growing issue is cyberbullying, with the rapid growth of social media and children and young adults having more access to these platforms at young ages, bullying has become a massive online issue. With the number of children and young people being bullied rising from 25% between 2019 and 2020 and with one in three young people having experienced bullying online (The Annual Bullying Survey 2020 | Ditch the Label. 2020). Without a clear education on the issue of bullying and cyberbullying and how to stop or prevent it, children and young adults are vulnerable to attacks and bullying is a key factor in them developing issues such as depression, anxiety and eating disorders, as well as abuse of alcohol and drugs and self-harm (Bullying. 2021).

Therefore, a Secure Anti-bullying web-app is a necessary as an educational and prevention tool which will help children and young adults, as well as parents who may not know how to support their children when they experience bullying. This will be done with useful links and interactive elements such as quizzes, as well as contact details of services which can be contacted if needed for support.

Project Aims and Objectives

Aims-

To design and to develop an Android web-application which aims to be a resource used by children, young adults, and parents to find support, information, and educational tools to tackle bullying, with a large focus on cyberbullying. The web app aims to be an information and reporting hub, used by people of all ages for support and guidance against bullying and to promote ways to prevent cyber bullying, the app will be linked to many other external professional resources to use, including other professional websites, and further reading, such as parent guides on supporting their children. On the app itself, there will be guidance on how to handle bullying. The app will include features like a mood journal so the user can personally track the mood that they are feeling and how to make changes that can benefit them. There will also be educational quizzes available through the application these can be used by any age group, these will detail key facts and figures about bullying.

Objectives-

- Understanding the issue of bullying and cyberbullying
 - Research the effects of bullying and effective prevention methods I can implement.

- Understanding of other resources and how they can be improved.
 - Looking into these competitors or similar resources and what they do and do not do which could be the unique feature of my app.

- Develop a user interface focused on Children and Young adults.
 - Navigation of the app is done with ease and well labelled.
 - Simple, easy to read, facts page.
 - Support Page with clearly labelled links and contact information.
- Create a secure and defined back-end.
 - Create a secure database that also could be scalable.
 - Secure connection between front-end and back-end
- Implement a secure register and Log in system.
 - Two factor authentications
 - Secure communication between Database and front-end
 - Attack prevention from SQL injection/brute force etc.
- Develop Interactive elements of the application.
 - A range of quizzes based on identifying bullying and detailing facts.
 - When users select answers, pop ups will show a more in-depth fact description.
 - A way for the user to input their mood in a mood journal, depending on how they feel the app will show different results (e.g., if the user recorded that they were feeling down, the app would display ways to improve mental wellbeing, whereas if they recorded that they were feeling good, the app would reaffirm this to them)
 - Daily Notifications to remind users to use the mood journal.
- Develop pages on how to identify Cyberbullying.
 - What cyberbullying is.
 - What to do if cyberbullying is happening.
 - Where to report cyberbullying on popular social media platforms.
- Develop Parental Support pages
 - Parental guide on how to support children going through bullying.
- Review the web app with real user testing and to gather feedback from this to ensure thorough testing has been done.

Desirable Objectives

- Easily adaptable for other versions of the web-app such as a website version or on an IOS device.
- A way to gather more data from the app, such as a statistics admin page, showing how many people use the app, as well as popular features of the app.

- A way of contacting services internally using the app instead of unnecessary external steps.

To create my web-app I am following the Agile Software development approach (What is Agile Methodology in Project Management?. 2021). I have chosen this approach as it is a very adaptable model which aims to continuously improve and support the development of the application. My work plan may be adapted in the future to so that research used can be implemented without delaying project progress.

Week 1 (1st-7th Feb):

- Write up the Initial Plan.
 - Project Title
 - Project Description
 - Project Aims and Objectives
 - Work Plan
- Create a Development Diary.
 - Make note of week 1 progress.

Deliverable: Initial Report (8th Feb)

Milestone: Initial Plan to be completed

Week 2 (8th-14th Feb)

- Set up the GitLab.
- Research:
 - Security on Web apps.
 - Tools that can be used to implement useful application features.
 - Similar applications/websites (list pros and cons, improvements that can be made)
- Documentation
 - Begin Project report documentation – set out structure of report.
- Update Development Diary

Week 3 (15th-21st Feb)

- Development:
 - Design front-end structure
- Research:
 - User based research to find needs of the web-app.
 - Research the functional and non-functional requirements.
- Documentation:
 - Write up introduction.
 - Use Cases.
 - Functional and non-functional requirements.
- Update Development Diary

Milestone: requirements are gathered, and main design is completed.

Week 4-(22nd-28th Feb)

- Development:

- Start creating the interface for the app.
- Basic app navigation functions.
- Research:
 - Creating a secure database for user details
 - Creating a secure connection from back end to front end
- Update Development Diary

Milestone: The front-end structure is implemented.

Week 5 (1st-7th Mar)

- Development:
 - Continue Development of core features.
 - Design database and begin implementation.
 - Populate the database for testing.

Milestone: Database design is completed.

Week 6-(8th-14th Mar)

- Development:
 - Connect the database and front-end, with security features in mind when thinking how they will communicate.
 - Continue with front-end development, notably the log in system.
- Supervisor Meeting- discuss progress, refine ideas, and create plan for next steps and improvements.
- Documentation:
 - Write Test cases

Milestone: the front-end and back-end are connected and work with each other.

Week 7 (15th-21st Mar)

- Development:
 - Continue log in system development.
 - Create educational quizzes for the application.
 - Research and implement facts and key information for the pages of the app.
- Research:
 - Additional features that could be included in the app.

Milestone: Main app has interactive functions and login system is complete

Week 8 (22nd-28th Mar)

- Development:
 - Do basic testing of log in system to make sure that the app is secure, note this down for the test plan.
 - Start implementation of some features found through the research, this may be new features or improvements on already implemented elements.

Easter break

Week 9 (19th-25th Apr)

- Development:
 - Continue implementation of features.
- Documentation:
 - Start main body of final report.

Milestone: Final report is ready to be constructed.

Week 10 (26th-2nd May)

- Supervisor Meeting-discussion of progress, update on next steps of final report and final changes to the app.
- Development:
 - Test the web-app.
 - Make sure the app is running at optimal efficiency.
- Documentation
 - Continue with Report

Milestone: App has completed testing and development.

Week 11 (3rd-9th May)

- Documentation:
 - Continue with Report.

Week 12- (10th- 14th May)

- Finalise Project, Proofread and final changes to report.

Milestone: Project Completed and submitted

Deliverable: Project Report (14th May)

Anti-Bullying web-app for Children and Young Adults

[illegible]

