**Technological University Dublin**

# Project Plan

by

Sam O'Connor, Luke Meates, Burair Moosavi

A proposed project plan for our year 3 group project

Bachelor of Science in Computing

in the
Department
Computing and Cyber Security

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# Declaration of Authorship

I, AUTHOR NAME, declare that this thesis titled, 'Project Plan' and the work presented in it are my own. I confirm that:

- This work was done wholly or mainly while in candidature for a research degree at this University.

- Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated.

- Where I have consulted the published work of others, this is always clearly attributed.

- Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work.

- I have acknowledged all main sources of help.

- Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself.

Signed:
_____

Date:
_____

# Contents

# MyndConnect: A Mental Well-Being App

## Objective

Our goal is to create a mental well-being app prototype that helps users take better care of their mental health by combining features from existing mental health apps into one easy-to-use application. With mental well-being being such a priority in 2024, we wanted to build an complete mobile app that brings together the best premium features on the market that would require the user to upgrade to avail of these features. By doing this, we hope to give users a more complete, supportive experience for managing their mental health on a daily basis.

## Scope

Our project aims to deliver the following:

- **Working Prototype:**
  - A functional mobile app prototype that includes the core features:
    * Social Support
    * mood tracking
    * journaling
    * Planner
    * guided meditation
    * find a therapist

- **Evaluation Report:** A thorough review of the system based on functional testing and user acceptance testing (UAT) results.

- **Recommendations for further work:** A set of recommendations outlining what needs to be done to move from the prototype to a fully working system. This will include considerations like enhanced security, user interface improvements, and support for additional features such as social integration or real-time counselling services.

The project will include features such as mood tracking, journaling, peer support, and secure access to mental health resources. All features will prioritize data security and privacy compliance.

**Exclusions**

iOS development, advanced AI analytics, and integration with third-party health apps are outside the scope.

## Stakeholders

## Project Supervisor

Gerome Donnelly

## Team Members

Sam O'Connor, Luke Meates, Burair Moosavi

### Project Manager

Oversees project timelines, resource allocation, and deliverables.

# Project Timeline

## Key Milestones

- UI/UX Design Completion – December 15, 2024

- Backend Development – January 31, 2025

- Frontend Integration – February 28, 2025

- AI Content Moderation and Testing – March 31, 2025

- Final Testing and Bug Fixing – April 15, 2025

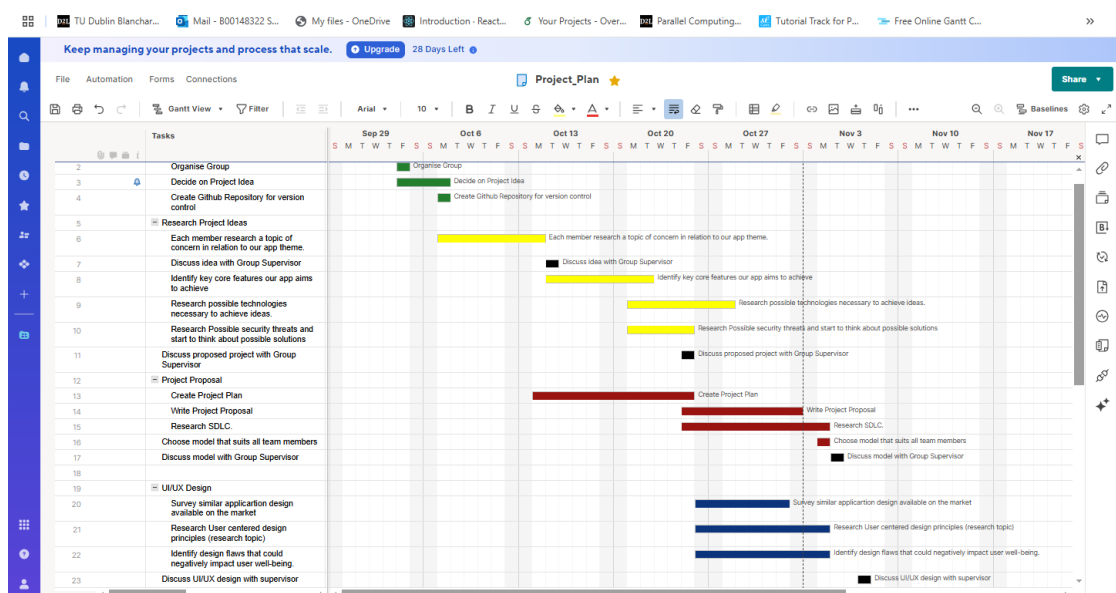- Deployment – April 30, 2025

## GAANT Chart



FIGURE .1: Gaant Chart September - October
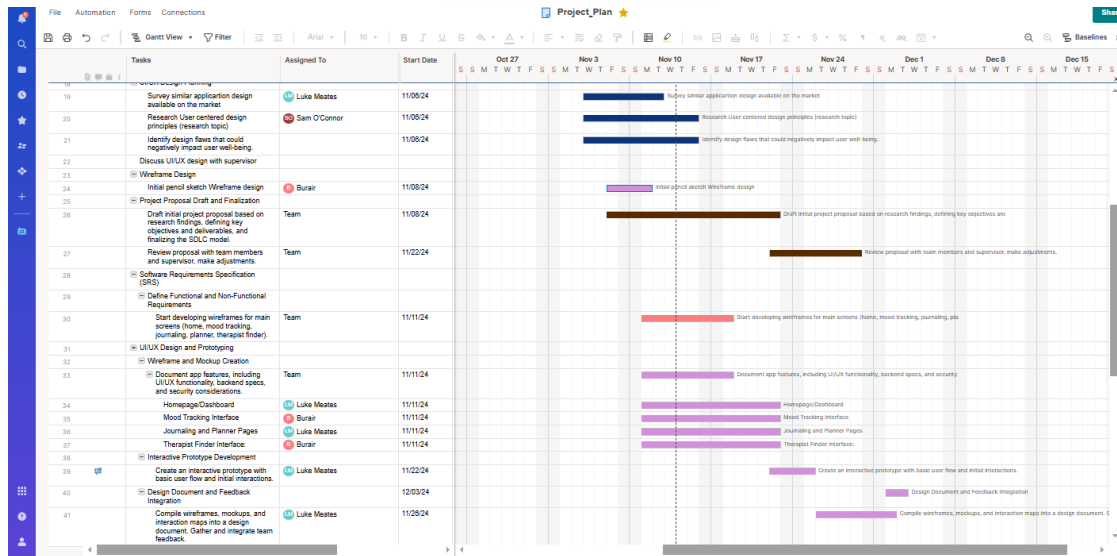
FIGURE .2: Gaant Chart November
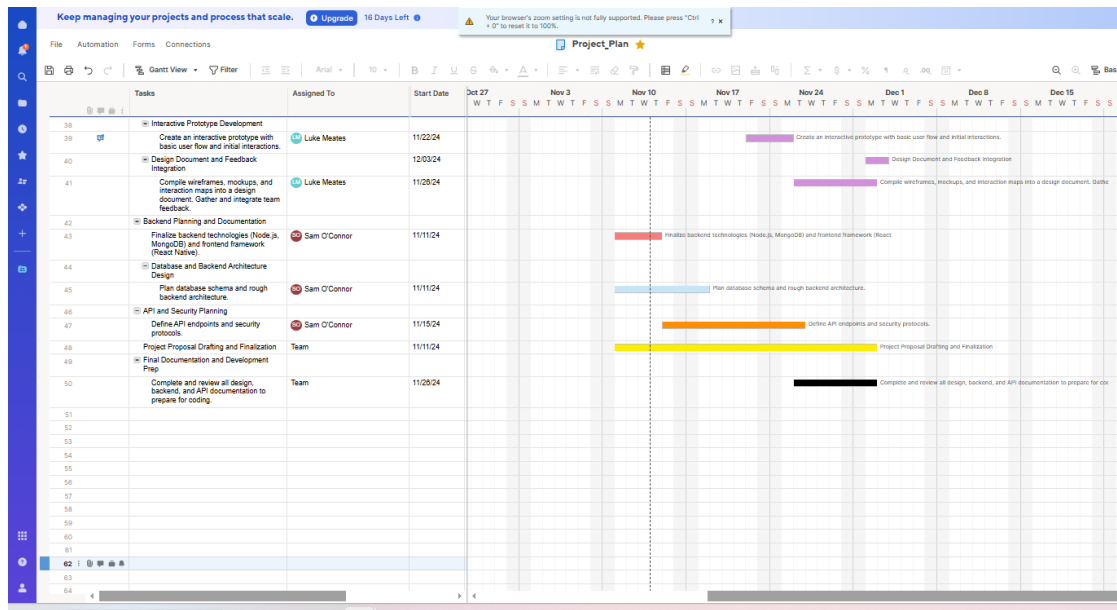


FIGURE .3: Gaant Chart November - December

# Work Breakdown Structure (WBS)

## Planning

### Project Introduction and Setup

- **Task:**

  - Organize project team
  - Decide on Project Idea between group
  - Identify roles
  - Set up project repository (GitHub), and create version control plan

- **Responsible:** All Team Members

- **Duration:** 1 week

- **Timeline:** September 30 - October 07

### *Project Proposal and Goal Setting*

- **Task:**

  - Define project objectives,
  - deliverables, and unique aspects
  - Develop initial proposal document.

- **Responsible:** All Team Members

- **Duration:** 1 week

- **Timeline:** October 7 - October 15

### Research and Requirements Gathering

- **Task:**

    - Conduct research on user needs

    - UI/UX best practices

    - security/privacy concerns for mental health apps.

- **Responsible:** All Team Members with a specific focus for each member

- **Duration:** 2 week

- **Timeline:** October 15 - October 28

### Software Requirements Specification (SRS)

- **Task:**

    - Document functional requirements,

    - non-functional requirements,

    - system specifications for the app

- **Responsible:** Sam (with input from Luke and Burair for UI/UX requirements)

- **Duration:** 1.5 week

- **Timeline:** October 28 - November 08

## UI/UX Design and Prototyping

### UI/UX Design Preparation

- **Task:**

    - Establish user-centered design principles with a focus on empathy, simplicity, and accessibility in the mental health context.

- **Responsible:** Luke and Burair

- **Duration:** 3 days

- **Timeline:** October 28 - October 31

### Wireframe and Mockup Creation

- **Task:**

  - Develop wireframes and UI mockups for core app screens (home, mood tracking, journaling, planner, therapist finder).
    - ∗ Subtasks:
      - · **Homepage and Dashboard:** Luke
      - · **Mood Tracking Interface:** Burair
      - · **Journaling and Planner Pages:** Luke
      - · **Therapist Finder Interface:** Burair
      - · **Feedback on Design:** Collect feedback from team and supervisor.

- **Responsible:** Luke and Burair

- **Duration:** 1 week

- **Timeline:** October 31 - November 07

### Prototype Design and Interaction Mapping

- **Task:**

  - Create a basic interactive prototype, including user flow and initial UI interactions

- **Responsible:** Luke and Burair

- **Duration:** 3 days

- **Timeline:** November 07 - November 10

### Design Document

- **Task:**

  - Compile all wireframes, mockups, and prototype interaction maps into a complete design document

- **Responsible:** Luke and Burair

- **Duration:** 4 days

- **Timeline:** November 10 - November 14

# <u>Backend and Database Planning</u>

## *Technology Stack Finalization*

- **Task:**

  - inalize technologies to be used for backend and frontend, including database (MongoDB), server (Node.js), and frontend framework (React Native).

- **Responsible:** Sam

- **Duration:** 3 days

- **Timeline:** November 08 - November 11

## *Database and Backend Architecture Design*

- **Task:**

  - Plan the database schema and create a rough architecture outline for server setup, data handling, and backend logic.

- **Responsible:** Sam

- **Duration:** 1 week

- **Timeline:** November 11 - November 18

## *Backend API and Security Planning*

- **Task:**

  - Outline API endpoints and data security protocols to be implemented, based on identified requirements.

- **Responsible:** Sam

- **Duration:** 1 week

- **Timeline:** November 18 - November 26

# Finalise Documentations

*Preparation for development phase*

- **Task:**

  – Finalize design document, prepare for frontend coding phase

- **Responsible:** All Members

- **Duration:** 1 week

- **Timeline:** November 26 - December 02

# Resource Management

## Human Resources

- Project Supervisor

- Team Leader

- UI/UX Designer

- Frontend Developer

- Backend Developer

## Equipment and Tools

- Docker, Node.js, MongoDB Atlas, React Native

- Testing Devices

# Risk Management

## Project Planning and Setup Risks

- **Misalignment on Goals and Scope of project**

  - **Mitigation:** Discuss, finalize the scope with the team, and get supervisor feedback early..

- **Poor Version Control and Collaboration**

  - **Mitigation:** Use GitHub with a plan and review code often.

## Requirements and Research Risks

- **Incomplete or Inaccurate Requirements**

  - **Mitigation:** Involve all team members in requirements gathering and validate requirements with the supervisor.

- **Limited user feedback**

  - **Mitigation:** Use secondary research, get informal feedback from potential users, and prioritize available feedback.

## UI/UX Design Risks

- **Design Delays or Changes**

  - **Mitigation:** Create wireframes and prototypes early to visualize the app's structure and spot navigation issues before development.

- **Accessibility and Usability Issues**

  - **Mitigation:** Not including accessibility features (e.g., text resizing, high contrast) could exclude users with disabilities, reducing the app's inclusivity.

## Backend and Database Risks

- **Incorrect Database Schema Design**

  - **Mitigation:** Design and review database schema early, and adjust the databse as requirements evolve.

- **Security Vulnerabilities in Backend Development**

  - **Mitigation:**Use secure login, encryption, and regular security checks.

- **Integratimg the Backend and Frontend Challenges**

  - **Mitigation:** Set clear API guidelines and involve both backend and frontend developersin the design.

## Timeline and Project Management Risks

- **Team Availability and Time Constraints**

  - **Mitigation:** Schedule regular check-ins, set realistic deadlines, and redistribute workload if necessary.

- **UnanticipaProblems**

  - **Mitigation:** Set aside time for research, identify alternative technologies, and seek help from the supervisor or avaialble lecturers on technical issues or concerns.

## Risks with Testing and Quality

- **Insufficient Testing and Debugging**

  - **Mitigation:** Use unit, integration, and usability testing during development, with automated tests for key parts.

- **Inadequate User Feedback before Deployment**

  - **Mitigation:** Have users beta test, gather feedback, and fix usability issues before the app launch.

## Maintenance and Support Risks

- **Post-Deployment Bugs or Updates**

  - **Mitigation:** Plan a maintenance phase for fixes and updates and set up a process for user issues.

- **Data breaches or security issues post-deployment**

  - **Mitigation:** Monitor security, have a breach response plan, and keep users informed.

# Communication Plan

## Regular Updates

Weekly meetings, bi-weekly stakeholder updates, and monthly progress reports.

## Reporting Structure

The Project Manager coordinates all updates, escalates issues, and reports progress to the Group Supervisor.

# Evaluation and Success Criteria

### Deliverable Quality

Feedback on features, design, and security.

### Deadline Adherence

Completion of milestones within the planned timeline.

### User Engagement

Active daily usage and positive feedback.