FIT2002 IT Project Management
Semester 2, 2025
Assignment One

Team 0220

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Deliverable 1 - Team Working Agreement

FIT2002 – Working Agreement (Team Charter)	
Team number	**Team 0220**
Team members	**Paolo Macasadia, Tony Hoang, Le Nguyen, Ben Howard**
Team objectives	**Our main team objective is to effectively demonstrate the key principles of project management which will develop our communication, organisational and collaborative skills and lead to useful industry experience to properly prepare us to enter the industry. Furthermore, to get experience in a student capacity to learn and apply good project management. We also are aiming to maximise marks where possible and achieve an overall HD grade.**
Team characteristics	**Our team is very open and creative and we excel at brainstorming ideas. However, our team is weak at punctuality and organisation. The strengths and weaknesses of our team are based on our team roles. Out of the four team roles, our team has one connector, one innovator, and two analysts. This means we are great at creating ideas and creating in-depth and detailed reports, but we lack some planning abilities to manage tasks because we have no one who excels at the planner role. However, we have a good balance of focused, reliable, creative and analytical skills so we can combat the team's planning gap by putting extra work in communicating and working together as a team.**
Core values	**The core values that we care most about are transparency, timeliness, accountability and professionalism. We value the contribution of each team member and are adamant that we complete tasks in a timely manner. This means that when we delegate tasks we want each member to be transparent on their progress and be accountable when tasks are delayed.**

Group norms and code of conduct	**As a team we will work together on completing the tasks required for the assignments. We will have frequent weekly meetings where collaboration of work will be expected and deliberation of any inconsistencies between members occur. We expect that team members complete delegated tasks during periods between meetings, and we expect to have a comforting environment where anyone can voice their opinions and be taken into consideration going forward with any decisions.**
Participation and collaboration approach	**We have decided on a weekly meeting for deliberating, assigning tasks and working together would be an effective method for our team. During the meetings, any inquiries and questions on a teammate's work will be questioned and discussed. We believe in completing our work in between meetings and then asking for feedback during meetings. We also allow feedback to be given in our group chat, and in comments or suggestions on shared documents.**
Communications	**The preferred method of communication is using an Instagram group chat. This will allow us to have transparent and frequent check-ins, ask quick clarifying questions, and schedule more formal means of communication. For more formal and collaborative meetings we will utilise both Zoom meetings and in-person meetings when necessary. Zoom meetings will allow a formal meeting online to communicate from different locations. We will use Instagram as our primary problem escalation and for further discussions in our Zoom and in-person meetings.**
Problem solving	**We will work around issues by discussing between all members how our workload can be arranged accordingly for the problem. In the case of a team member not being able to meet or work effectively, coming to a compromise with all team mates capabilities will be considered. Our team will stay flexible and in case of any problems re-evaluate our time, tasks and progress and make a calculated plan of action. We will not blame others for unforeseen circumstances but focus on the project goal and maintaining the progress of the project.**

Conflict management	**When any disagreements arise we first de-escalate any conflict and ensure clear and open communications, making sure everyone is calm and feels safe. We will meet with group discussion to understand the disagreement and discuss both sides of the conflict, letting everyone have their voice heard without judgement. We will then see what valuable information can be perceived from a disagreement. We will try our best to resolve the conflict peacefully and ensure an equitable outcome that balances the needs of team members and the needs of the project.**
Signatures	**Benjamin Howard - (Signature)** **Paolo Macasadia - (Signature)** **Tony Hoang - (Signature)** *Tony Nguyen* **- (Signature)**

Deliverable 2 - Project Charter

Project Title: Social Fitness App

Project Manager Name: Tony H
Project Manager Contact Details: thoa0046@student.monash.edu

Description: A social platform that is aligned with LifeLoop's mission to create a digital experience that supports our daily routines and community connection. Our app is designed to connect individuals through a shared interest in gym and fitness. This project extends LifeLoop's community focused approach fostering a supportive community for those who may feel isolated or find it challenging to build social connections.

Project Scope And Objectives

Our Scope:

- Our mission is to create a social app that allows for people to get connected to one another through the medium of gym.
- The scope of this app will include tasks like developing the physical app within the appropriate time frame and budget.
- User registration, profile creation and authentication system
- User testing and quality assurance
- Community features (groups, challenges, events)
- Development of a cross-platform app (web and mobile responsive)
- 18 month maintenance and support.
- Integration with LifeLoops existing eco-system and design standards.

What the product will do and the expected outcome

The App will connect Fitness enthusiasts though location based partner tracking, allow users to find gym partners, share their workout details to the community and see what local community events are happening. Users can find compatible gym partners based on their fitness goals and preferences. The platform creates friendships based on the user's interests and desires. The expected outcome is to reduce fitness related social isolation by creating meaningful connections with other users which in return should lead to improved workout consistency and motivation.

SMART Objectives that align with the business case

User Acquisition: Obtain over 1,000 registered active users within 3 months of launch, with at least 80% profile completion setup.

Technical Performance: Achieve 99.5% uptime and page load timers under 2 seconds for all core features.

Engagement: Maintain an average daily rate of active users to be 40% and average posts of once per week.

Project Start And Finish Dates

Project Duration: March 1, 2026 to August 31 2027 (18 months)

Project Initiation and Stakeholder Alignment: March 1- April 27, 2026

User Research and UX Design Phase: April 28 - August 9, 2026

Technical Architecture and Backend Development: August 10, 2026 - February 3, 2027

Frontend Development and Integration: November 8, 2026 - March 21, 2027

User Testing and Iteration Cycles: March 22 - April 20, 2027

Full Launch and Documentation: April 21 - August 12, 2027

High-Level Budget Estimate

The total estimated project cost $300,000 AUD.

Budget Breakdown:

- Development Team and Consulting services: $160,840
- UX/UI Design and Testing: $31,650
- Infrastructure, Hosting, and Third-Party Services: $32,040
- Project Management and Quality Assurance: $107,300
- Contingency Reserve (10%): $38,250

Project Development Approach

In this project, we will be employing the Hybrid approach as it best fits our model for balancing both a good feedback loop with our client and the benefits of a structured approach (Project Management Institute, 2021).

For the majority of our project we will have a predictive and structured skeleton following the principles of the Waterfall approach. A Waterfall approach is good for small projects as it is easier to manage projects with set requirements and tight budgets (Lucid Content Team, 2019). This will allow us to reduce scope creep to have lower costs and stay within our timeframe, and make it easier to predict estimated costs to stay below the limited budget of $300,000.

Our development phase however will follow an Agile approach focusing on sprints with constant feedback. An Agile approach is good for customer satisfaction as it focuses on customer and team collaboration, quality software, and adaptability (Lucid Content Team, 2019). This will encourage feedback to adapt with the clients requirements and create the best possible app for our target demographic. This will give us a better understanding of what stakeholders and end-users want and don't want in our app and is vital for developing a user-centric social app.

By choosing a Hybrid approach, it allows our team to establish a clear initial scope and budget to align with our client, LifeLoop, while having a development approach that incorporates the client. This choice also aligns with LifeLoop's preference of a Hybrid methodology and to fit with LifeLoop's expectations to maintain: potential risks, a timeframe of 18 months, budget of $300,000, and a feasible project scope.

Key Stakeholders

Stakeholder	Role	Interest
LifeLoop	Client/Sponsor	**High Interest/High Influence**: Since they are focused on the App's alignment with LifeLoops mission and overall ROI. Provides funding.
Gym and Fitness Enthusiasts	End User	**High Interest/Medium Influence**: They are the target audience therefore their primary interest is the usability and functionality of the app allowing them to pursue fitness goals. Their influence is given through feedback and user testing.

Development Consultant	Technical Expertise	**High Interest/Medium Influence**: Responsible for the main technical architecture and making sure that the application will have a high uptime, robust and scalable. They have high influence over technology choices and implementation.
App Store Platforms	Distribution Partner	**Medium Interest/High Influence**: These platforms control our app distribution and their main interest is ensuring our app meets quality standards, compliments and follows user safety guidelines. They have high influence through app approval processes, featured app opportunities and policy enforcement.

Project Success Criteria

Our Project Success will be measured through us achieving our three SMART objectives:

- Obtaining 1,000+ registered active users within 3 months of launch with 80% profile completion
- Maintaining 99.5% uptime with sub-2 second load times
- Sustaining 40% daily user engagement with weekly posting frequency.

Project delivery success includes completing all phases within the 18 month timeline while staying under budget.

Assumptions And Exclusions

Assumptions: LifeLoop will provide access to their existing eco-system and branding. We will be able to test users throughout our development. App store approval processes follow standard approval times and our third party providers maintain stability.

Exclusions: The project will not include integration with any wear-able devices to start. There will not be any mutli-language support. No in-app monetisation and direct gym membership integration will be available. AI-powered workout recommendations and any features beyond basic sharing functionality.

Deliverable 4 - Requirements Traceability Matrix

Project Name:	LoopFitness
Project Manager Name:	Tony H
Project Description:	Fitness app attempting to track and manage creating a social environment

ID	Requirements (Functional or Non-Functional)	Assumption(s) and/or Customer Need(s)	Category	Source	Status
R1	User Account Management	Users have access to email and will complete verification process	Functional	IT policy document	Approved
R2	Matching feature connecting users, based on goals and locale.	This would assume customers are willing participants inputting; preferences and location access	Functional	Client	In Review
R3	App load time < 2 seconds for main screens	If designed on LifeLoop's structure, assumes stable hosting	Non-functional	App standards from VC3	Approved
R4	App uptime of minimum 99.5%	An app that can be used at anytime, especially for a fitness app will be required	Non-functional	App standards from VC3	Approved
R5	Cross platform compatibility	Allowing app to work flawlessly between iOS, Android and website will be needed for a larger intake of users	Functional	Client	Open
R6	Send notifications including push notifications, event reminders, new messages, and successful matches	Requires permission of notif. Gives users more reasons to navigate to the app.	Functional	Client	Draft
R7	Databases must meet the Australian Privacy Principles	Customers want their data to be secure and only used for the reasons they agreed in the Privacy Policy on registration.	Non-functional	Data protection standards from Australian Privacy Principles	Approved
R8	A view for community content and leaderboards	Unmotivated customers want to view the progression of people in their community to inspire themselves to reach their goals.	Functional	Client	In Review
R9	Goal Tracker and Completed Exercises/Challenges	Customers want to be able to see their own progress, compare it to previous time periods, and see how close they are to reaching their goals.	Functional	Client	In Review

Deliverable 5 - Scope Management

Project Scope Statement

LoopFitness aims to connect different people in order to workout. Motivating and interacting with each other through matchmaking; groups/individuals. Interacting through friendly competitions and messages. Our key features; partner / group matching, messaging and goal tracking. Personalised training plans and community leaderboards. With each feature further building on with the design philosophy of strengthening motivation, retention (in terms of working out) and engagement of users long term.

Deliverables and Acceptance Criteria

1. User Registration & Authentication System

- **Functional:** Users can register and log in securely.
- **Non-Functional:** The system must be secure and scalable.
    - Quality Standard: The platform must comply with AWS framework and guidelines for optimal scalability under varying user loads. Acceptance criteria mandate the system handles 1,000+ concurrent users without any performance degradation across all core functionalities. Quality metrics will be measured through comprehensive load testing demonstrating less than 2% response time degradation under maximum user capacity.

    - Quality Standard: The system must adhere to ISO 27001 security framework standards to ensure comprehensive information security management. Acceptance criteria require zero successful penetration attempts during security testing. Quality metrics include monthly security audits maintaining 100% compliance scores and quarterly penetration testing reports.

2. Community Features (Groups and Challenges)

- **Functional:** Users can create and join groups, and participate in challenges.
- **Non-Functional:** The features must be easy to use and perform quickly.
- **Acceptance Criteria:** 90% of testers can use the features without help. Group feeds load in under 2 seconds.

3. Location-Based Partner Tracking

- **Functional:** Users can find gym partners based on their location and goals.
- **Non-Functional:** The search results must be accurate and user data kept private.

    - The system must comply with Australian Communications and Media Authority (ACMA) location accuracy standards ensuring precise partner matching within specified geographical locations. Acceptance criteria require search results with 95% accuracy and explicit user consent for all location data sharing. Quality metrics include weekly accuracy testing with 95% of location queries maintaining 150-meter tolerance.
- **Acceptance Criteria:** Search results are 95% accurate, and the app gets user permission before using location data.

4. Content Sharing and User Feeds

- **Functional:** Users can post content and interact with others' posts.
- **Non-Functional:** The features must be reliable and easy to maintain.
    - The platform must comply with W3C Web Content Accessibility Guidelines 2.1 (WCAG 2.1) standards with 90% of users able to complete core tasks without assistance. Quality metrics include automated accessibility testing maintaining 100% WCAG AA compliance score through monthly audits.
- **Acceptance Criteria:** Post submissions have a 100% success rate. The underlying code is well-documented.

5. App Performance and Stability

- **Functional:** The app works on both web and mobile platforms.
- **Non-Functional:** The app must be highly available and tolerate heavy user loads.
- **Acceptance Criteria:** The app maintains 99.5% uptime and handles 1,000 concurrent users with page load times under 2 seconds.

Exclusions

Technical Exclusions:
- Integration with wearables (Apple Watch, FitBit etc)
- AI-powered recommendations - Possibly in the future
- Integration with external gym membership systems - Third party dependency risk

Geographical Exclusions:
- Multi-language support - English for the launch
- International payment processing - Domestic market

Business Exclusions:
- Monetisation features (premium membership, in app purchases) - Post launch consideration
- Medical Health assessments or fitness evaluations - Liability concerns

Constraints

Resource Constraints:

- Testing environment - Only limited to iOS and Android devices
- Server capacity: First server deployment limited to supporting 5,000 concurrent users

Technical Constraints:

- Budget: $300,000 allocated for the entire project
- Infrastructure: Cloud-based deployment using AWS services
- Third-Party APIs: Limited to Google Maps API for location services.

Regulatory Constraints:

- Must comply with Privacy Act (1988)
- Privacy Policies must be implemented before user testing begins
- Location data handling must meet current privacy standards

Assumptions

User Assumptions: Targets users with smartphones with GPS and internet. The primary user demographic is 18-30 with basic fitness knowledge. Users will engage with social features and be motivated by community interaction. Users are comfortable with sharing location data for partner matching and gym purposes.

Business Assumptions: Market demand for fitness social apps remains strong, competition will not release similar features during the development period. User acquisition cost through organic growth will be sustainable.

Technical Assumptions: Third-Party APIs will maintain current service levels and pricing. App store approval times will not significantly delay the timeline. Current mobile operating systems will be supported (iOS 13+, Android 8+).

Deliverables 6 & 7 - WBS and Gantt Chart

Work Breakdown Structure

0.0 LoopFitness: Social Fitness App

1.0 Project Initiation

1.1 Define app objectives for social fitness motivation
- 1.1.1 Define target demographic (18-30 age group)

1.2 Identify key stakeholders
- 1.2.1 Create internal stakeholder roles and responsibilities
- 1.2.2 Develop external partners (Google Maps API)
- 1.2.3 Define user representative group for testing

1.3 Develop project charter
- 1.3.1 Document project scope and constraints
- 1.3.2 Establish project structure
- 1.3.3 Define success criteria metrics

1.4 Project Budget
- 1.4.1 Validate $300,000 project budget allocation
- 1.4.2 Define cost control and monitoring processes for project
- 1.4.3 Establish financial reporting

1.5 Assign roles for each stage of the project
- 1.5.1 Define development team structure
- 1.5.2 Assign UI/UX designers
- 1.5.3 Establish testing and QA team roles

Milestone: Project Charter Approved

2.0 Requirements Gathering & Planning

2.1 Identify Customer needs and core features
- 2.1.1 Stakeholder workshops ascertain motivation, social needs
- 2.1.2 Competitor comparisons / benchmarking
- 2.1.3 Host user surveys
- 2.1.4 Identify accessibility requirements

2.2 Define app features and social capabilities
- 2.2.1 Partner Matching Algorithm defines criteria for matching gym partners
- 2.2.2 Community Engagement Features (posts and comments)
- 2.2.3 Gamification Elements (leader boards)
- 2.2.4 Privacy & Safety Features permissions (blocking or location sharing permissions)

2.3 Document functional and non-functional requirements

2.4 Finalise project plan, timeline and deliverables

Milestone: Requirements Sign Off

3.0 UI/UX Design

3.1 Wireframes & prototyping
- 3.1.1 Wireframe low fidelity designs
- 3.1.2 Create interactive prototypes
- 3.1.3 UX testing on a small scale

3.2 Design layout and user interface
- 3.2.1 Ensuring Lifeloops' branding guidelines are met
- 3.2.2 Design higher fidelity screen designs
- 3.2.3 Review with stakeholders

3.3 Prototype Development
- 3.3.1 Interactive demo build
- 3.3.2 Conduct usability testing

3.4 Refinement
- 3.4.1 Implement feedback from testing workshops
- 3.4.2 Produce design system/style guide

Milestone: App UI/UX Design Complete

4.0 App Development

4.1 Technical Architecture and Backend Development

- 4.1.1 Create database and backend APIs

- 4.1.1.1 Create database schema
- 4.1.1.2 Create User Profile API (custom profile creation)
- 4.1.1.3 Create Partner Matching API (algorithm)
- 4.1.1.4 Create Analytics and Insights API (tracks usage)

- 4.1.1.5 Create Notifications and Messaging API

- 4.1.2 Implementation of authentication and authorization
- 4.1.2.1 Comply with Privacy Act and industry standards
- 4.1.3 Community features (groups, events, challenges)
- 4.1.4 Integrate with LifeLoops' current ecosystem

Milestone: Complete Backend

4.2 Frontend Development and Integration

- 4.2.1 Build user registration UI

- 4.2.1.1 Developing Login/Sign-up screens

4.2.2 Build user feed UI for content sharing
4.2.2.1 Create Scrollable posts with likes/comments
4.2.2.2 Create Post creation (text, images, workouts)
4.2.3 Build events UI for joining groups and challenges
4.2.3.1 Establish Event list & detail pages
4.2.3.2 Build RSVP & participation
4.2.3.3 Create Group/challenge leaderboards
4.2.4 Build matching feature UI

4.2.4.1 Develop Partner suggestions (list/swipe)
4.2.4.2 Profile preview and connect option
4.2.4.3 Build Basic in-app chat

4.2.5 Accessibility UI
4.2.5.1 Dark mode & text scaling
4.2.5.2 VoiceOver/screen reader compatibility
4.2.5.3 Color contrast compliance

Milestone: Complete Frontend

4.3 App Integration & System Testing

4.3.1 Connect APIs to frontend
4.3.2 End-to-end testing

Milestone: App Ready for Testing

5.0 Testing & Quality Assurance

5.1 Internal QA Testing
5.1.1 Unit testing of backend modules
5.1.2 Regression testing frontend features
5.2 User Acceptance Testing
5.2.1 Conduct first round of UA testing
5.2.2 Fixes & iteration
5.2.3 Conduct final round and finalize
5.3 Performance & Security testing
5.3.1 Loading testing of all screens with high and low traffic
5.3.2 Security validation (auth, datasafety)

Milestone : UAT sign-off

6.0 Deployment & Launch

6.1 Set up servers and hosting settings
6.1.1 Connect to Google Maps API
6.2 Deploying app to relevant app stores

6.2.1 Ensure app meets with app store T&C process ready for launch
6.3 Collecting user feedback and maintenance
6.4 Full launch of app
6.4.1 Release iOS App store Version
6.4.2 Release Android Play Store Version

Milestone: Full launch

7.0 Project closure & Handover

7.1 Prepare project closure documents
7.1.1 Compile project report covering all key objectives and its outcomes
7.1.2 Write up the goods and bad practices during project
7.1.3 Financial report
7.2 Project handover
7.2.1 Schedule meeting with all relevant stakeholders
7.2.2 Provide training to all staff on usage and maintenance of app
7.2.3 Address any concerns of current iteration of app

Milestone = Handover completed

Gantt Chart

(see Appendix A)

Justification

We chose the specific times for our project based on typical industry project performances. We found that for the vision of LifeLoop and the given timeframe of 18 months, we would follow the structure of a typical enterprise app which is 6-12 months but adding extra time for our crucial tasks and stages (Essential Designs Team, 2025).

For our initial stages of initiation and analysis of the industry we chose around 2 months. While most standards prefer 2-4 total for planning (Essential Designs Team, 2025; Dhruv, 2024). We felt it was necessary to extend this time as the majority of projects fail because of insufficient planning and we wanted to ensure that we gave ample time to collect user and client requirements. Another reason being that the durations needed scaling due to our timeframe having 6 more months than standard.

By following the standards and scaling we chose ~3 months for design and ~8 months for development (Essential Designs Team). In particular development is the longest and most complex stage so estimations need to account for those factors. Khoi (2024) suggests that the complexity and amount of features is a major reason for project delays so we overestimated our development durations for each of our key features to account for potential delays. Then for the testing phase we had multiple rounds of testing following the 2024 Industry Standards of having around 4-6 of testing for mobile apps (Watson, 2024). For that reason we chose a duration of around a month while also allowing time for feedback and improvements. Still using the standards, we estimated the end of our project to be ~4 months for the full launch and closure of the project.

Deliverables 8 - Cost Model and Baseline

Cost Model

WBS Items	Units/Days/ Months	Cost Per Unit	Subtotal	WBS Phase Total	% of Total
1.0 Project Initiation & Management				$88,730	26.67%
1.1 Project Manager	120	$577	$69,240		
1.2 Office Space & Utilities	18	$1200	$21,600		
1.3 Internet & Communications	18	$200	$3,600		
1.4 Insurance & Legal	18	$150	$2,700		
1.5 Miscellaneous	18	$55	$990		
1.6 Training & Certification	1	$1,400	$1,400		
2.0 Requirements Gathering & Planning				$11,000	3.31%
2.1 Business Analyst	22	$500	$11,000		
3.0 UI/UX Design				$24,045	7.23%
3.1 UX/UI Designer	45	$481	$21,645		
3.2 User Testing Platform	6	$400	$2,400		
4.0 App Development				$123,192	41.11%
4.1 Senior Full-Stack Developer	94	$538	$51,648		
4.2 Mobile Developer (iOS/Android)	60	$500	$30,000		
4.3 DevOps Engineer	20	$654	$13,080		
4.4 Development Laptops	4	$500	$2,000		
4.5 AWS Cloud Infrastructure	12	$578	$6,936		
4.6 Google Maps API	12	$244	$2,928		
4.7 Push Notification Services	18	$150	$2,700		
4.8 Code Repository & CI/CD	12	$180	$2,160		
4.9 Software Licenses	1	$3,200	$3,200		
4.10 SSL Certificates & Security	12	$200	$2400		
5.0 Testing & Quality Assurance				$13,380	4.47%
5.1 Quality Assurance Tester	30	$346	$10,380		
5.2 Testing Devices	6	$500	$3,000		
6.0 Deployment & Launch				$198	0.07%
6.1 App Store Fees	1	$198	$198		
7.0 Project Closure & Handover				$0	0.00%
Costs covered by PM allocation in WBS 1.0					

BASE COST SUBTOTAL				$266,805.06	90%
Contingency Reserve				$26,950.51	10%
GRAND TOTAL				$293,595	100%
Category	**Total Cost**				
Labour Costs Total	$205,225				
Materials & Equipment Total	$5,000				
Services & Vendors Total	$31,538				
Overheads Total	$18,090				
Base Project Cost	$266,805.06				
Contingency Total (10%)	$26,950.51				
TOTAL PROJECT COST	$293,595				

Cost Model Methodology and Justification

The cost estimation methodology we used was a mix of both bottom-up and analogous methods. Bottom-up was deployed since we wanted to create an accurate base cost where each WBS item was individually estimated making it more accurate and reliable (Project Management Institute, 2020). Due to our tight budget we felt it better to have more detail with a bottom-up approach rather than a parametric approach. Bottom-up estimates also balance the top-down approach of defining objectives which helps ensure we don't solely focus on our goals but also our budget (Stenbeck, 2008). We also used Analogous for our labour rates because we wanted our labour rates to be similar with market comparisons and previous projects. We felt this was necessary as labour costs tend to be the most expensive and we want the extra accuracy to better estimates.

The biggest estimated costs were the labour wages. We sourced our rates from the Hays Salary Guide FY24/25 for roles based in Melbourne which created a realistic overview for staff expenses (Hays, 2024). We chose to pick the typical salary data rather than higher end contractor rates as we prioritise reaching a minimum viable product with the necessary features, so that we stay below our budget and within scope. For our other estimated expenses we took average retail prices for resources, training and certifications. We also chose a 10% contingency reserve of the total base cost. This is an industry-standard practice for software/app development to mitigate risks such as minor scope changes, unforeseen technical issues, or slight delays (Mărcuță & MoldStud Research Team, 2024).

We estimated our labour hours based on the justified timeframes in our WBS of our scope deliverables. The Project Manager has the most hours as they are on the entire project followed by the full-stack development and mobile development as the bulk of the project is the development of the APIs and UI. The other roles were also estimated based on the WBS and were considerably lower and in line with the task durations.

Our major vendors are AWS, Google Maps, iOS store and Google Play store. We specifically chose these vendors because they align with our strategic fit, are the most known and popular in their respective industries and are known for being reliable. They provide reliable pricing and make it easier to estimate costs and compared to other vendors are most cost efficient.

Cost Baseline

WBS Item	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18	Total
1.1 Project Manager	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$3,846	$69,240
1.2 Office Space & Utilities	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$900	$21,600
1.3 Internet & Communications	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$3,600
1.4 Insurance & Legal	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$2,700
1.5 Miscellaneous	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$55	$990
1.6 Training & Certification	$1,400																		$1,400
2.1 Business Analyst	$7,000	$4000																	$11,000
3.1 UX/UI Designer				$2,405	$9,620	$9,620													$2,400
3.2 User Testing Platform				$400	$400	$400													
4.1 Senior Full-Stack						$6,456	$6,456	$6,456	$6,456	$6,456	$6,456	$6,456	$6,456						$51,648

Developer																		
4.2 Mobile Developer (iOS/Android)							$5000	$5000	$5000	$5000	$5000	$5000						$30,000
4.3 DevOps Engineer												$6,540	$6,540					$13,080
4.4 Development PCs						$10,000												$10,000
4.5 AWS Cloud Infrastructure						$578	$578	$578	$578	$578	$578	$578	$578	$578	$578	$578	$578	$6,936
4.6 Google Maps API						$244	$244	$244	$244	$244	$244	$244	$244	$244	$244	$244	$244	$2,928
4.7 Push Notification Services						$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150	$1,800
4.8 Code Repository & CI/CD						$180	$180	$180	$180	$180	$180	$180	$180	$180	$180	$180	$180	$2,160
4.9 Software Licenses						$3,200												$3,200
4.10 SSL Certificates & Security						$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$200	$2400

5.1 Quality Assurance Tester																	$5,190	$5,190	$10,380
5.2 Testing Devices																		$3,000	$3,000
6.1 App Store Fees																		$198	$198
8. Reserves (10%)																			$26,690
TOTAL	$13,851	$9,451	$5,451	$8,256	$15,471	$36,479	$18,259	$18,259	$18,259	$18,259	$18,259	$24,799	$19,799	$6,803	$6,803	$6,803	$11,993	$15,191	$299,907

Baseline Analysis

The total baseline figure of $293,595.57 is consistent with the overall project's grand total, meaning it matches across all financial documentation. This consistency is crucial for effective budget monitoring. The project is estimated to have an average monthly expenditure of approximately $14,697.93, covering everything from rent to software licenses.

An analysis of the baseline reveals several key periods of significant expenditure. The most notable spike occurs in Month 6, where spending jumps to $36,479.67. This is primarily due to the ramp-up of the full development team and the initiation of key cloud infrastructure and third-party services. Another period of high expenditure is in Month 12, with a spend of $24,799.67, reflecting the increased activity during final development and testing phases. Conversely, the early months (M1-M4) show lower expenditures, as the project is still in the initial planning and setup stages. This phased spending approach ensures that cash flow is managed effectively and aligns with the project’s delivery lifecycle.

Cost Monitoring and Control

To ensure the project stays within budget, an efficient monitoring and control process will be implemented. This process is designed to proactively identify and address potential budget variances (Georgas & Vallance, 1987).

Milestone-Based Cost Tracking: At the completion of each major project milestone, a comprehensive cost report will be generated. This report will compare the actual spend against the planned expenditure for that milestone, providing a high-level overview of the project's financial health.

Monthly Cost Reviews: Regular, formal budget reviews will be held at the end of each month. During these reviews, the project manager will present the monthly expenditure report, comparing actual costs to the cost baseline. Any discrepancies will be investigated and documented.

Variance Analysis: This is a key control mechanism used to determine the cause and impact of any budget overruns or underruns (Project Management Institute, 2019). Two primary metrics will be tracked:

Cost Variance (CV): The difference between the Earned Value (EV) and the Actual Cost (AC). A negative CV will indicate a budget overrun, while a positive CV shows an underrun.

Schedule Variance (SV): The difference between the Earned Value (EV) and the Planned Value (PV). While primarily a schedule metric, a negative SV can signal potential future cost overruns as a result of project delays.

Through these combined tracking and analysis methods, the project team will be equipped to make timely, informed decisions and take corrective action to keep the project on its planned financial trajectory.

Deliverable 9 - Risk Management Plan

Project Risk Register

RISK ID	CATEGORY	RISK DESCRIPTION	IMPACT DESCRIPTION	IMPACT LEVEL	PROBABILITY LEVEL	PRIORITY LEVEL	RISK RESPONSE	OWNER
R01	Technical/ Schedule	LifeLoop's partner-matching feature depends on the Google Maps API and given devices GPS. These services provided may be unreliable due to outages. And based on the app's architecture its matchmaking logic is tightly coupled to these services which can be harmful with over reliance. (Sattelberg, 2024)	If API implementation fails / produces incorrect data, users may receive poor matchmaking suggestions. Returning with negative reviews, reducing new users on launch. Revision would be necessary in this case which would delay the already tight Project closure & Handover 4 week period	4	1	4	Mitigation – Early API integration to focus on rigorous testing and allow for developers to gain better understanding of its usage.	Technical Lead
R02	Opportunity	Rapid growth in popularity of LifeLoop has filled the needs of a society of increasing social isolation, driving up user numbers from initial estimates.	With increased adoption of app, would boost brand recognition, revenue, and reputation with associated companies. Allowing opportunities for collaborations.	4	2	8	Exploit – Start community challenges to encourage users to explore more features present in app, partnering up with more well known sporting brands / offering to sell their products through promotions would lead to higher revenue	Marketing Lead

							through split profits of product sold	
R03	Budget	External services used in-app are billed based on “type of request made, with each request classified into a specific SKU” (Radar Team, 2025) meaning as users grow or services change policies cost may rise unpredictably.	If costs were to exceed allocated for app development and maintenance and does not account for such consumption. The project may need to adjust funds lessening quality in order areas of development.	4	3	12	Accept and observe and negotiate service pricing. Agreeing on usage limits. Have contingency funds to help keep the project well funded throughout.	Project Manager
R04	Stakeholder	Achieving the SMART objective of 1000 + active users within three months requires proper marketing strategy, onboarding, and social-media presence. With inadequate promotional materials / unintuitive in-app navigation and features adoption goals will not be met.	Low adoption would mean reducing ROI, limiting data collection of users in order to better develop / polish community features promised in the roadmap.	3	3	9	Ensure marketing occurs on all platforms and promotions on established LifeLoop projects to target established health-oriented users.	Marketing Lead
R05	External	Throughout the 18-month development period, government legislation / app store T&C’s may conflict with the current state of the app, preventing its submission online.	New obligations possibly result in design changes and reiterations, and legal consultations. Late changes will heavily impact app submission period,	4	1	4	Vigilant monitoring with current affairs and policies, designing a more adaptable architecture lessening impact on structure changes, and leaving room	Project Manager

			necessitating a new approval lowering stakeholder trust.				in an 18-month period to account for such events.	
R06	Scope	The project will require prior knowledge in full-stack development, UX/UI design and experience present in Gantt chart. Were key developers to leave, hiring a high grade with skills to do so would be hard. New devs to be required resulting in a slower turnover thus tighter schedule	Loss of personnel would jeopardize decision-making, slow development, timelines, and a reliance on outside contractors. Replacement staff with less experience would raise costs and possibly cause issues with established teams. Delaying the project.	4	3	12	Mitigation – Train existing members, higher emphasis on documentation throughout development in case of team members leaving.	Team Leader

Risk Matrix

PROBABILITY						
	5					
	4					
	3			R04	R03, R06	
	2				R02	
	1				R01, R05	
		1	2	3	4	5
	IMPACT					

Justification

Risk Analysis: We used a scoring system on a scale of 1-5 to assess the risks across two dimensions.

Impact Scale (1-5):
1 = Minimal impact on project objectives
2 = Minor impact on project objectives
3 = Moderate impact on project objectives
4 = Major impact on project objectives
5 = Critical impact on project objectives

Probability Scale (1-5):
1 = Very low likelihood of occurrence (<10%)
2 = Low likelihood of occurrence (10-30%)
3 = Medium likelihood of occurrence (30-50%)
4 = High likelihood of occurrence (50-80%)
5 = Very high likelihood of occurrence (>80%)

Risk Score Calculation
Risk Score = Probability of occurrence x Impact

For example;
R01 (API Dependency): Probability 1 x Impact 4 = Risk Score 4
R04 (Budget Overrun): Probability 3 x Impact 4 = Risk Score 12

Risk Zones
Green (Low Risk): Accept and monitor
Yellow (Medium Risk): Monitor and prepare contingency plans
Orange (Medium-High Risk): Active mitigation required
Red (High Risk): Immediate action and escalation required

Individual Risk Justification

R01 - API Dependency Failure
Position: Probability 1, Impact 4

Risk Description: Since our app is fully dependent on the Google Maps API and AWS Cloud infrastructure, should any of those external service providers have any downtime issues it could affect the application majorly to a degree of the app not being functional.

Impact Justification(Score - 4 Major): Should our application go down, it would affect all SMART objectives and heavily impact our project's success criteria especially during our testing phases and gathering user testing which could push our deadlines creating delays.

Probability Justification(Score - 1 Very Low): Both Google Maps API and AWS Cloud are highly reliable services with robust uptime commitments. The likelihood of a complete service outset is very low, though not impossible. Google Maps API Service Level Agreement commits a monthly uptime of at least 99.9 and AWS also commits a 99.99 monthly uptime (Google Cloud, n.d.; Amazon Web Services, n.d.).

R02 - Rapid Growth Opportunity
Position: Probability 2, Impact 4

Risk Description: If our application has rapid growth in popularity that is beyond our initial estimates it helps address the increasing social isolation while boosting our numbers.

Risk Justification(Score - 4 Major:) While increased adoption will bring benefits such as brand recognition and revenue, the impact is moderate compared to the core success criteria.

Probability Justification(Score - 2 Low): Given the strong market demand for digital solutions to social isolation the likelihood of continued rapid adoption is high.

R03 - Budget Overrun
Position: Probability 3, Impact 4

Risk Description: There is a risk that the project expenses may exceed the allocated budget due to unforeseen circumstances such as costs in development, testing, infrastructure or third party services.

Risk Justification(Score - 4 Major:) If the budget is exceeded, it could heavily impact the project's ability to meet the objectives, and delay our deliverables to stakeholders, or compromise the quality of the project.

Probability Justification(Score -3 Moderate): With careful consideration and planning of our Budget as well as placing a 10% contingency reserve within our budget while the risk remains it is still a moderate likelihood since unforeseen events could happen anytime within our projects timeline.

R04 - Low user Adoption
Position: Probability 3, Impact 3

Risk description: Failing to attract at least 1000 active users within three months due to poor marketing, app usability / lack of features can reduce initial ROI. Furthermore a lack of users can make the partner search function harder due to lack of people and further distances between users.

Impact Justification(Score - 3 Moderate): Missing the targeted adoption target will really only affect the revenue and initial dataset required to refine community features. However, this would only be an initial set back as long as a steady stream of users make their way to the app and isn’t a major concern that hinders app development.

Probability Justification(Score - 3 Moderate): Although we have ascertained a genuine demand for this digital wellness app, adoption of our product relies heavily on marketing success and well designed product to hold onto incoming customers.

R05 - Regulatory Changes
Position: Probability 1, Impact 4

Risk Description: The development of our app assumes that the government and app stores don’t change their policies. If they were to change policies it would affect the project’s development timeline.

Impact Justification(Score - 4 Major): The risk can vary from delays in the development to scrapping the whole project. The damage is so unpredictable that it poses a major risk to the project's limited budget and time.

Probability Justification(Score - 1 Very Low): The probability of this risk occurring is very low because governments and app stores rarely change policy and any damaging changes would likely have backlash.

R06 - Key Personnel Leaving
Position: Probability 3, Impact 4
Risk Description: Loss of experienced team members will slow down development and will cause teams to rely more on the more inexperienced hires until replacement is found.

Impact level (Score - 4): Considering, the current iteration of the project timeline was made with certain people in mind, a revision of the project will have to be made, halting current processes and delaying the project driving up costs in the meantime. Which we have determined to be a pretty high impact level.

Probability justification (Score - 3): Without knowing or much context to team dynamics it is hard to determine how likely a co-worker will leave. However, given the 18 month timeframe provided by lifeloop there is a chance that a team member will do so.

Response Planning

Risk Response Cost Analysis:

R01 - API Dependency Failure

Response: Because this project heavily relies on Google Maps services for its partner matching. Implementing a fallback would have about 2 weeks of a senior full-stack developer with contributions put in at different areas such as the QA teams. This would be roughly $538 a day from the full stack developer with them working the full 2 weeks and an additional $346 a day from the QA tester for the last 3 days of the risk response

Cost Requirements: This would amount to about ~~$ 6418

Time Requirements: 2 weeks

R02 - Rapid Growth Opportunity
Response: Because a rapid growth opportunity would most likely lead to a higher level of investment in order to push out features and retain users longer, it can be expected that more time and money will be spent in order to capitalize on the opportunity.

Cost Requirements: ~~ $25,500 which would include the 8 days of business analysis at $500/ day, 10 days of UX/UI design at $481/ day, 10 days of mobile development, and 5 days of senior full-stack development, with a very rough estimate on marketing and partnership with influencers for about $9,000

Time Requirements: 1.5 months (30 days) can be expected with the growth opportunity impact level being high this would be expected

R03 - Budget Overrun
Response: Because it is expected that prices will change with the uses from vendors varied and other services, using some of the contingency reserve (see cost baseline). However, our only source of concern is for in-app services.

Cost Requirements: this means that we are expecting around $5,385, covering our additional 5 day project management (to negotiate prices), and further 5 day business analysis of $500/day

Time Requirements: This should take about 2 weeks (~10 days)

R04 - Low user Adoption
Response: To ensure this doesn't occur ensuring a more aggressive approach in marketing takes place. Ensuring the app reaches the ears of a large audience, and refining the app to ensure ease of navigation and enough features to guarantee customer satisfaction.

Cost Requirements: About $35,155 - which would include 15 days of UX/UI design focusing on improvements at $481/day, 10 days of business analysis at $500/day, 10 days of mobile dev $500/day, 5 days of senior full-stack development at $538/day. And a $5,250 budget for marketing staff (15 days with $350/day) and reserve about $10,000 for advertising and promotions

Time Requirements: This in all would take up to 1.5 months (45 days)

R05 - Regulatory Changes
Response: Since we are monitoring current app legislation and ensuring flexible architecture is met, a lot of time will be invested in this risk response in order for ease of transition and change being made in the schedule buffer.

Cost Requirements: $14,684 - This would consist of project management ($577/day), 10 days business analysis ($500/day), 6 days of senior full-stack dev ($538/day), 5 days of DevOps engineering ($654/day) with two months of additional insurance / legal coverage ($150/month)

Time Requirements: 1 additional month, with a 2 month buffer to ensure smooth deployment.

R06 - Key Personnel Leaving
Response: In order to replace responsibilities of personnel leaving, training and emphasis on documentation will have to be met in order to keep operations running.

Cost Requirements: $15,724 is our estimate if such events occur, and this only covers one instance of a personnel leaving. An estimate of $1,400 on training and certification course, 5 days each of senior full-stack, mobile and UX/UI (this will depend on what role is vacant and will respectively cost, $538/day, $500/day, $481/day) 2 days of PM $577 in order to coordinate training, with 5 additional days of senior developer and PM working on improving current documentation practices

Time Requirements: roughly 4 weeks / 20 days

Deliverables 10 & 11 - Group Reflection and Individual Reflections

The following group reflection and individual reflections are focused on our individual and team experiences with collaborating and managing a project, and our reflections follow the structure outlined by Gibbs Reflective Cycle (Gibbs, 1988).

Group Reflection

Description:

Throughout A1, our team had worked well collaboratively in order to come up with a project plan for the LoopFitness app. Earlier on, we had come up with a team charter which we had to uphold throughout the project. This would emphasise key values; transparency, accountability, and professionalism. Most of these values were met, though challenges were met with missing classes and misaligned schedules for meetings. Issues which although did impede progress, were resolved with members having stepped up in order to keep tasks moving forward, to keep deliverables being completed on time.

Feelings:

As a group, we were satisfied with the ideas discussed during our meetings, and overall quality of outputs. Our initial brainstorming showcased how comfortable everyone was in communicating. We had collaborated heavily on the WBS and Gantt Chart, highlighting how well we can work together. Although slight frustration did come about with delayed / missed meetings, this was balanced out with open discussions and initiative taken to fill the gaps left with others' work.

Evaluation:

Our collaboration has demonstrated key strengths. Communication was effective, when concerns / questions arose team members would voice them clearly. Mainly through instagram chats and Zoom meetings. Leadership roles were rotated when any members failed to do so which helped push progress in spite of scheduling delays. This loose leadership did reveal inefficiencies in the group with a clearer hierarchy would have helped with prevention of repeated iterations of certain tasks, helping alleviate stress caused by uneven contributions.

Analysis:

The strengths of our collaboration aligned very well with our Team Charter. We managed to uphold transparency well and feedback was well-received and communicated, helping resolve

any conflicts that would have arisen. Though we fell flat in punctuality, mentioned in the charter. When members were unavailable, our flexible structure, and problem-solving approach was key in helping us adapt, which only highlights how we needed stronger accountability measures which would reduce last-minute redos.

Conclusion:

As a whole, the group had demonstrated our commitment and resilience well. We had achieved a high level of work standard through supporting one another. The final product we hope has reflected our creativity and teamwork, a better defined leadership structure would have been imperative to improving our timeliness while reducing dependency on certain individuals stepping up to compensate in areas of work.

Action Plan:

In the future, our team should more formally appoint a Project Manager, Planner at the initial stages to heighten our accountability and ensure deadlines are met consistently. Meeting attendance was met well but punctuality was poor, this will have to be sorted out through the Planner mainly, coming up with fallback plans if any absentees come up. Our strengths of open communication and feedback, with a stable working structure would help us deliver higher quality work.

Individual Reflections

Individual Reflection - Tony H. (35083964)

Description : During the assignment, I frequently discussed task delegation with one group member. I managed to complete my assigned task while also revisiting peer's work to provide feedback and improve existing work. Risk reflection especially, relied on me reviewing past work in order to elaborate my points.

Feelings : I was happy with the quality of my contributions, though I now recognise I should have reached out to encourage a more active collaboration for my tasks. At certain times I felt frustrated with absent group members in applied classes, and the apparent lack of understanding meant I had to explain missed material and sections

Evaluation : Despite setbacks we did communicate well, explaining what was expected from all group members. With delays in task completion disrupting the work flow, but ultimately was resolved well.

Analysis : Meetings were productive, however, failing to address the issue caused some disharmony in the work, with varying work quality and timeliness of completion.

Conclusion : Overall I was happy with my deliverables and how I helped keep the team aligned. However, I avoided addressing the group weaknesses. Picking up a few more tasks to prevent more re-iterations would have been helpful in this regard.

Action plan : In future projects, establish a more concrete structure so everyone understands their roles better to accommodate accountability and up project performance. Instead of the currently loose leadership role the team is currently running
Individual rating : HD
Team rating : HD

Individual Reflection - Paolo M. (34994696)

Description: For Assignment 1, we delegated tasks during the process and that included individual and collaborative tasks. I was able to finish most of my tasks in a timely manner but sometimes I needed collaboration with the other members. For example when I worked on the Gantt Chart I needed the help of the other team members to discuss and confirm the parts of the WBS.

Feelings: I was usually focused and calm when completing my tasks but sometimes more stressed when there were delays in the tasks of other team members. I was sometimes worried about the quality but was much more calm when we collaborated and refined work.

Evaluation: The parts that went well were the quality of the tasks and our brainstorming of ideas but the parts that went poorly were the timeliness of the project deliverables.

Analysis: I felt that only completing my tasks was not as important as the overall team's progress, and that focusing on collaboration and supporting teammates would aid in the likelihood of a more successful project.

Conclusion: I learnt that when managing a project it is important that your role in the project isn't just your delegated tasks but partaking in collaboration and motivation for the project. I would assign myself a HD for the efforts for my tasks and also a HD for the team as overall the quality of the team's work shined.

Action Plan: In the future to deal with situations that arose in this assignment, I would encourage better defined roles and responsibilities and choose a Project Manager and a Planner to keep the project focused.

Individual Reflection - Benjamin Howard (36265217)

Description: Our group worked well together and collaborated on the LoopFitness Social app over this semester. We used Instagram for informal discussions and regular meetings and discussions about tasks and progress.

Feelings: I felt positive and engaged about the project because our group demonstrated openness to discussion and maintained active communication though instagram. As the project progressed I felt that the uncertainty and mild frustrations due to lack of a clear structure made it a bit difficult to get tasks finished.

Evaluation: Our group's openness to communication and each of our voices were heard during brainstorming sessions and the Instagram discussion proved convenient alongside our regular Zoom meetings. The voluntary task allocated allowed team members to choose tasks they felt could do better or were more willing to do.

Analysis: The volunteer task allocation reflected our team's organisation which is more common in Agile methodologies. However, this experience highlighted the importance of the norming stage to establish clear roles and responsibilities.

Conclusion: This project gave me good insights into how to best structure a team and the importance of clear communication and organisation structures early in the project. I learned that successful projects require balancing democratic participation with clear accountability. I would give myself a H for my efforts and a HD for my team.

Action Plan: Advocate for early role definition, implement structured communication tools such as Slack or MS teams that provide better documentation and task tracking capabilities than in the Google Document.

Individual Reflection - Tony Nguyen (35003596)

Description: Assignment 1 had a variety of challenges that proved difficult in relation to collaboration. There were many times that I can recall where the group as a collective were behind in our set goals and deadlines. However, through determination and perseverance in addition to the mutual respect that we all had for one another in terms of our joint grades, we managed to pull through and finished with an assignment that we were all happy with.

Feelings: There was always doubt within different ideologies and how tasks were approached and handled. However, with semi-regular group meetings over zoom, we were able to refine and collaborate on the work and produce quality work with vetting processes from all members. With the constant positive communication from the group, I trusted my group members more as time went on.

Evaluation: The parts that went well included the likes of the pitch and the interview however the parts that didn't go too smoothly was the many instances of tardiness across all members.

Analysis: I felt at times I wasn't contributing as much as everyone else so I made it a point to work on my assigned tasks with the utmost diligence and detail as I possibly could.

Conclusion: While working through the assignment, I realized that project management is much more than working on your own set tasks but rather working as a collective towards a larger objective. Overall, I am very satisfied with my teammates and I believe HD is a reasonable rating for our collaborative work.

Action Plan: For the future, being punctual should be at the top of all out lists when entering collaborative work.

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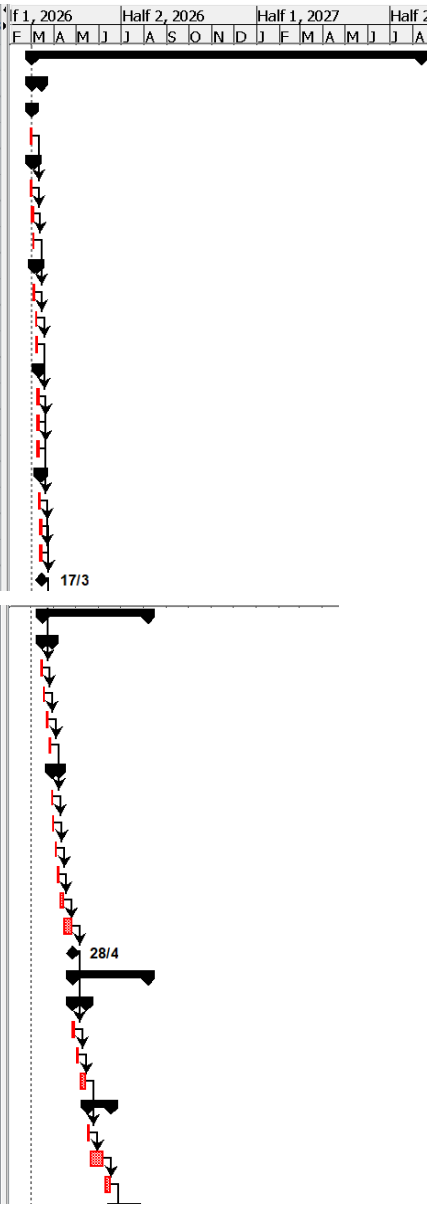
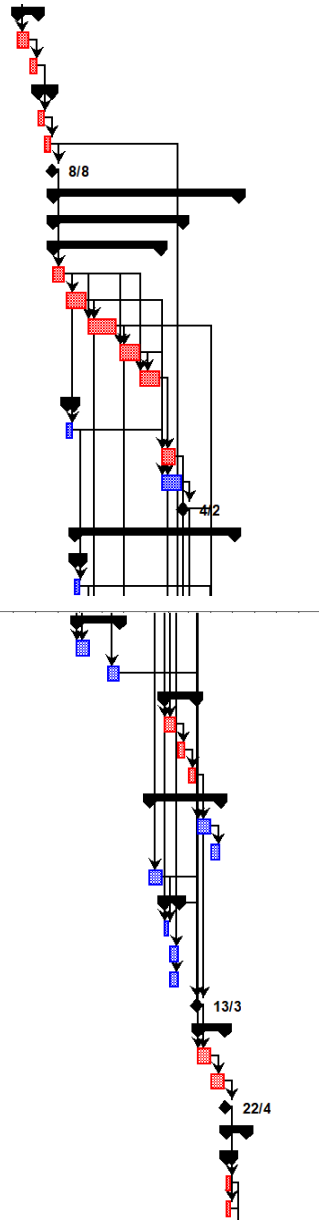
Appendices

Appendix A

	Name	Dura...	Start	Finish	Predecessors
1	**0.0 LoopFitness: Social Fitness App**	379 ...	2/3/26...	12/8/27...	
2	**1.0 Project Initiation**	11 d...	2/3/26...	16/3/26...	
3	**1.1 Define app objectives for social fitness motivation**	1 day	2/3/26...	2/3/26, ...	
4	1.1.1 Define target demographic (18-30 age group)	1 day	2/3/26, ...	2/3/26, 5:...	
5	**1.2 Identify key stakeholders**	3 days	3/3/26...	5/3/26, ...	
6	1.2.1 Create internal stakeholder roles and responsibilitie	1 day	3/3/26, ...	3/3/26, 5:...	4
7	1.2.2 Develop external partners (Google Maps API)	1 day	4/3/26, ...	4/3/26, 5:...	6
8	1.2.3 Define user representative group for testing	1 day	5/3/26, ...	5/3/26, 5:...	7
9	**1.3 Develop project charter**	3 days	6/3/26...	10/3/26...	
10	1.3.1 Document project scope and constraints	1 day	6/3/26, ...	6/3/26, 5:...	8
11	1.3.2 Establish project structure	1 day	9/3/26, ...	9/3/26, 5:...	10
12	1.3.3 Define success criteria metrics	1 day	10/3/26,...	10/3/26, ...	11
13	**1.4 Project Budget**	2 days	11/3/2...	12/3/26...	
14	1.4.1 Validate $300,000 project budget allocation	1 day	11/3/26,...	11/3/26, ...	12
15	1.4.2 Define cost control and monitoring processes for project	1 day	12/3/26,...	12/3/26, ...	14
16	1.4.3 Establish financial reporting	1 day	12/3/26,...	12/3/26, ...	14
17	**1.5 Assign roles for each stage of the project**	2 days	13/3/2...	16/3/26...	
18	1.5.1 Define development team structure	1 day	13/3/26,...	13/3/26, ...	15;16
19	1.5.2 Assign UI/UX designers	1 day	16/3/26,...	16/3/26, ...	18
20	1.5.3 Establish testing and QA team roles	1 day	16/3/26,...	16/3/26, ...	18
21	M1: Project Charter Approved	0 days	16/3/26,...	16/3/26, ...	19;20
22	**2.0 Requirements Gathering & Planning**	104 ...	17/3/2...	7/8/26, ...	
23	**2.1 Identify Customer needs and core features**	10 d...	17/3/2...	30/3/26...	
24	2.1.1 Stakeholder workshops ascertain motivation, social needs	2 days	17/3/26,...	18/3/26, ...	21
25	2.1.2 Competitor comparisons / benchmarking	2 days	19/3/26,...	20/3/26, ...	24
26	2.1.3 User surveys	4 days	23/3/26,...	26/3/26, ...	25
27	2.1.4 Identify accessibility requirements	2 days	27/3/26,...	30/3/26, ...	26
28	**2.2 Define app features and social capabilities**	8 days	31/3/2...	9/4/26, ...	
29	2.2.1 Partner Matching Algorithm defines criteria for matching gym partner	2 days	31/3/26,...	1/4/26, 5:...	27
30	2.2.2 Community Engagement Features (posts and comments)	2 days	2/4/26, ...	3/4/26, 5:...	29
31	2.2.3 Gamification Elements (leader boards)	2 days	6/4/26, ...	7/4/26, 5:...	30
32	2.2.4 Privacy & Safety Features permissions (blocking or location sharing p	2 days	8/4/26, ...	9/4/26, 5:...	31
33	2.3 Document functional and non-functional requirements	5 days	10/4/26,...	16/4/26, ...	32
34	2.4 Finalise project plan, timeline and deliverables	7 days	17/4/26,...	27/4/26, ...	33
35	M2: Requirements sign-off	0 days	27/4/26,...	27/4/26, ...	34
36	**3.0 UI/UX Design**	74 d...	28/4/2...	7/8/26, ...	
37	**3.1 Wireframes & prototyping**	14 d...	28/4/2...	15/5/26...	
38	3.1.1 Wireframe low fidelity designs	4 days	28/4/26,...	1/5/26, 5:...	35
39	3.1.2 Create interactive prototypes	4 days	4/5/26, ...	7/5/26, 5:...	38
40	3.1.3 UX testing on a small scale	6 days	8/5/26, ...	15/5/26, ...	39
41	**3.2 Design layout and user interface**	25 d...	18/5/2...	19/6/26...	
42	3.2.1 Ensuring Lifeloops' branding guidelines are met	4 days	18/5/26,...	21/5/26, ...	40
43	3.2.2 Design higher fidelity screen designs	14 days	22/5/26,...	10/6/26, ...	42
44	3.2.3 Review with stakeholders	7 days	11/6/26,...	19/6/26, ...	43



45	**⊟3.3 Prototype Development**	**21 d...**	**22/6/2...**	**20/7/26...**	
46	3.3.1 Interactive demo build	14 days	22/6/26,...	9/7/26, 5:...	44
47	3.3.2 Conduct usability testing	7 days	10/7/26,...	20/7/26, ...	46
48	**⊟3.4 Refinement**	**14 d...**	**21/7/2...**	**7/8/26, ...**	
49	3.4.1 Implement feedback from testing workshops	7 days	21/7/26,...	29/7/26, ...	47
50	3.4.2 Produce design system/style guide	7 days	30/7/26,...	7/8/26, 5:...	49
51	M3: App UI/UX Design Complete	0 days	7/8/26, ...	7/8/26, 5:...	50
52	**⊟4.0 App Development**	**183 ...**	**10/8/2...**	**21/4/27...**	
53	**⊟4.1 Technical Architecture and Backend Development**	**128 ...**	**10/8/2...**	**3/2/27, ...**	
54	**⊟4.1.1 Create database and back end APIs**	**107 ...**	**10/8/2...**	**5/1/27, ...**	
55	4.1.1.1 Create database schema	14 days	10/8/26,...	27/8/26, ...	51
56	4.1.1.2 Create User Profile API (custom profile creation)	21 days	28/8/26,...	25/9/26, ...	55
57	4.1.1.3 Create Partner Matching API (algorithm)	30 days	28/9/26,...	6/11/26, ...	55;56
58	4.1.1.4 Create Analytic and Insights API (tracks usage)	21 days	9/11/26,...	7/12/26, ...	55;57
59	4.1.1.5 Create Notifications and messaging APS	21 days	8/12/26,...	5/1/27, 5:...	55;58
60	**⊟4.1.2 Implementation of authentication and authorisation**	**7 days**	**28/8/2...**	**7/9/26, ...**	
61	4.1.2.1 Comply with Privacy Act and industry standards	7 days	28/8/26,...	7/9/26, 5:...	55
62	4.1.3 Community features (group, events, challenges)	14 days	6/1/27, ...	25/1/27, ...	56;57;58;59
63	4.1.4 Integrate with LifeLoops' current ecosystem	21 days	6/1/27, ...	3/2/27, 5:...	56;57;58;59;61
64	M4: Complete Backend for App	0 days	3/2/27, ...	3/2/27, 5:...	63
65	**⊟4.2 Frontend Development and Integration**	**158 ...**	**8/9/26...**	**15/4/27...**	
66	**⊟4.2.1 Build user registration UI**	**7 days**	**8/9/26...**	**16/9/26...**	
67	4.2.1.1 Developing Login/Sign-up screens	7 days	8/9/26, ...	16/9/26, ...	61
68	**⊟4.2.2 Build user feed UI for content sharing**	**44 d...**	**28/9/2...**	**26/11/2...**	
69	4.2.2.1 Create Scrollable posts with likes/comments	14 days	28/9/26,...	15/10/26,...	56;67
70	4.2.2.2 Create Post creation (text, images, workouts)	14 days	9/11/26,...	26/11/26,...	57
71	**⊟4.2.3 Build events UI for joining groups and challenges**	**34 d...**	**26/1/2...**	**12/3/27...**	
72	4.2.3.1 Establish Event list & detail pages	14 days	26/1/27,...	12/2/27, ...	62;70
73	4.2.3.2 Build RSVP & participation	10 days	15/2/27,...	26/2/27, ...	72
74	4.2.3.3 Create Group/challenge leaderboards	10 days	1/3/27, ...	12/3/27, ...	73
75	**⊟4.2.4 Build matching feature UI**	**72 d...**	**6/1/27...**	**15/4/27...**	
76	4.2.4.1 Develop Partner suggestions (list/swipe)	14 days	15/3/27,...	1/4/27, 5:...	57;74
77	4.2.4.2 Profile preview and connect option	10 days	2/4/27, ...	15/4/27, ...	76
78	4.2.4.3 Build Basic in app chat	14 days	6/1/27, ...	25/1/27, ...	59
79	**⊟4.2.5 Accessibility UI**	**17 d...**	**26/1/2...**	**17/2/27...**	
80	4.2.5.1 Dark mode & text scaling	7 days	26/1/27,...	3/2/27, 5:...	50;78
81	4.2.5.2 VoiceOver/screen reader compatibility	10 days	4/2/27, ...	17/2/27, ...	64
82	4.2.5.3 Color contrast compliance	10 days	4/2/27, ...	17/2/27, ...	64
83	M5: Complete App Frontend	0 days	12/3/27,...	12/3/27, ...	67;70;74;78;79
84	**⊟4.3 App integration & system testing**	**28 d...**	**15/3/2...**	**21/4/27...**	
85	4.3.1 Connect APIs to frontend	14 days	15/3/27,...	1/4/27, 5:...	64;83
86	4.3.2 End-to-end testing	14 days	2/4/27, ...	21/4/27, ...	85
87	M6: App Ready for Testing	0 days	21/4/27,...	21/4/27, ...	86
88	**⊟5.0 Testing & Quality Assurance**	**21 d...**	**22/4/2...**	**20/5/27...**	
89	**⊟5.1 Internal QA Testing**	**7 days**	**22/4/2...**	**30/4/27...**	
90	5.1.1 Unit testing of backend modules	7 days	22/4/27,...	30/4/27, ...	87
91	5.1.2 Regression testing frontend features	7 days	22/4/27,...	30/4/27, ...	87



92	**⊟5.2 User Acceptance Testing**	**12 d...**	**3/5/27...**	**18/5/27...**	
93	5.2.1 Conduct first round of UA testing	5 days	3/5/27, ...	7/5/27, 5:...	90;91
94	5.2.2 Fixes & iteration	7 days	10/5/27,...	18/5/27, ...	93
95	5.2.3 Conduct final round and finalize	5 days	10/5/27,...	14/5/27, ...	93
96	**⊟5.3 Performance & Security testing**	**4 days**	**17/5/2...**	**20/5/27...**	
97	5.3.1 Loading testing of all screens with high and low traffic	2 days	17/5/27,...	18/5/27, ...	95
98	5.3.2 Security validation (auth, datasafety)	4 days	17/5/27,...	20/5/27, ...	95
99	M7: User Acceptance sign-off	0 days	20/5/27,...	20/5/27, ...	98
100	**⊟6.0 Deployment & Launch**	**24 d...**	**21/5/2...**	**23/6/27...**	
101	**⊟6.1 Set up servers and hosting settings**	**4 days**	**21/5/2...**	**26/5/27...**	
102	6.1.1 Connect to Google Maps API	4 days	21/5/27,...	26/5/27, ...	99
103	**⊟6.2 Deploying app to relevant app stores**	**4 days**	**27/5/2...**	**1/6/27, ...**	
104	6.2.1 Ensure app meets with app store T&C process ready for launch	4 days	27/5/27,...	1/6/27, 5:...	102
105	6.3 Collecting user feedback and maintenance	14 days	2/6/27, ...	21/6/27, ...	104
106	**⊟6.4 Full launch of app**	**2 days**	**22/6/2...**	**23/6/27...**	
107	6.4.1 Release iOS App store Version	2 days	22/6/27,...	23/6/27, ...	105
108	6.4.2 Release Android Play Store Version	1 day	22/6/27,...	22/6/27, ...	105
109	M8: Full launch	0 days	23/6/27,...	23/6/27, ...	107;108
110	**⊟7.0 Project closure & Handover**	**36 d...**	**24/6/2...**	**12/8/27...**	
111	**⊟7.1 Prepare project closure documents**	**15 d...**	**24/6/2...**	**14/7/27...**	
112	7.1.1 Compile project report covering all key objectives and its outcomes	7 days	24/6/27,...	2/7/27, 5:...	109
113	7.1.2 Write up the goods and bad practices during project	4 days	5/7/27, ...	8/7/27, 5:...	112
114	7.1.3 Financial report	4 days	9/7/27, ...	14/7/27, ...	113
115	**⊟7.2 Project handover**	**21 d...**	**15/7/2...**	**12/8/27...**	
116	7.2.1 Schedule meeting with all relevant stakeholders	7 days	15/7/27,...	23/7/27, ...	114
117	7.2.2 Provide training to all staff on usage and maintenance of app	12 days	26/7/27,...	10/8/27, ...	116
118	7.2.3 Address any concerns of current iteration of app	2 days	11/8/27,...	12/8/27, ...	117
119	M9: Handover completed	0 days	12/8/27,...	12/8/27, ...	118