

IntelliHealth: AI-Enhanced Health Monitoring Platform



SOEN 6841 - Software Project Management

Group 24

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[Github Repository Link](#)

Agenda

- Introduction
- Market Justification
- Feasibility study
- Solution Approach
- Project Plan
- Risk Management Plan
- Budget Overview

Introduction

“Do you take your health and fitness seriously?”

IntelliHealth - an AI driven health monitoring app has got your back!

For **Health Enthusiasts**

1. Personalized Health Tracking
2. AI-Driven Workout Suggestions
3. Real-Time Health Monitoring

For the **Wellness Beginners**

1. Guided Wellness Programs
2. Nutrition Made Easy
3. Motivational Support



Market Justification

Apple Fitness

Downsides

- Limited compatibility with non-Apple devices may alienate potential users.
- Subscription-based pricing models may deter some users.
- May lack advanced health insights compared to specialized health monitoring systems.




Market Justification

Fitbit

Downsides

- Limited health insights beyond basic metrics.
- Some users report inaccuracies in tracking data affecting trust in the system.



The image shows two Fitbit Charge 6 smartwatches. The black watch on the left displays a heart rate of 68, a large green '12' for minutes, a large white '58' for seconds, and a distance of 7.546 miles. The orange watch on the right displays a heart rate of 145, a time of 00:25:14, and a distance of 3.4 miles. Both watches have a black screen and a colored strap.

Run your day & your routine

Say hi to Charge 6, our newest tracker that's packed with motivating fitness tools, Google essentials—like Maps, Wallet and YouTube Music controls—and our most accurate heart rate on a tracker yet.^{12,45}

Shop Charge 6 →

Market Justification


Samsung Health

Downsides

- Limited compatibility with non-Samsung devices may limit the user base.
- Interface complexity may be overwhelming for some users.

Galaxy Watch6 Series


Unlock your day's full potential with Samsung Galaxy Watch6, featuring our biggest screen¹ and advanced wellness insights.



Galaxy Watch6 Classic

Return of the iconic style


[Learn more](#)



Largest screen yet

Large space to view, tap, swipe and scroll


[Learn more](#)



Sleep Coaching

Develop healthy sleeping habits


[Learn more](#)



Fitness Tracking

with Personalized HR Zone

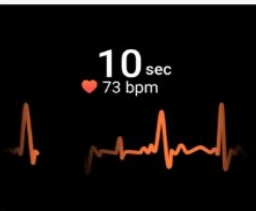
[Learn more](#)



Advanced Health Features

Get detailed insights on your body and wellness


[Learn more](#)



Connectivity

More than just a watch

[Learn more](#)



Market Justification

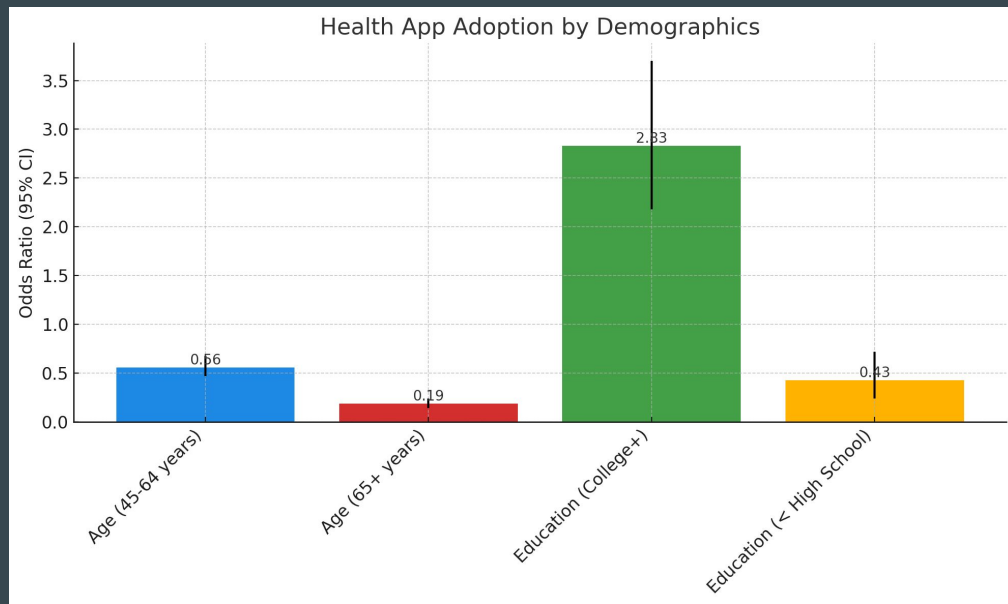
Mobile & Health App Usage Trends

Mobile Usage: Steep increase to over 90% globally by 2020.

Health Apps: Over 100,000 available, indicating strong public interest in digital health management tools.

Survey Insights

- Conducted by the National Cancer Institute across various demographics.
- Highlighted the widespread adoption of health apps, especially among younger, educated demographics.



Feasibility and Viability

Technical Feasibility Assessment

- Incorporating Advanced Technology, Tools and Infrastructure
- Overcoming Technical Challenges

Operational Feasibility Examination

- Alignment with the organization's vision
- Incorporation into organizational workflows and procedures

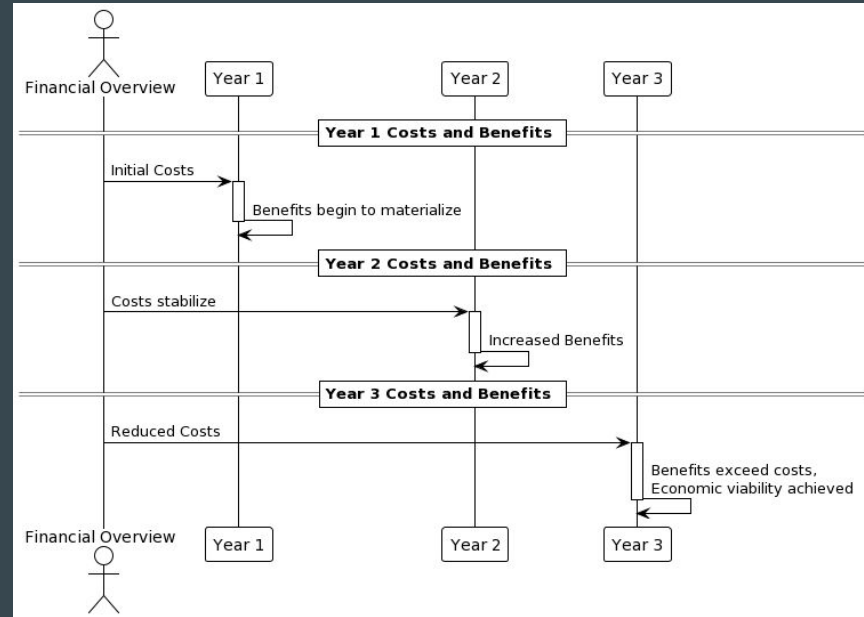
Economic Feasibility Evaluation

- Thorough examination of costs and benefits
- Comprehensive estimation of project costs

Scheduling Feasibility Outlook

- Strategic Planning for Agile Project Timelines
- Recognizing Key Project Dependencies and Milestones

Feasibility and Viability



Solution Approach

Key Features and Functionalities

Functional Requirements

- Real-time data ingestion
- Efficient data processing
- Advanced data analytics
- Alerting and Notifications
- Monitoring
- Configuration

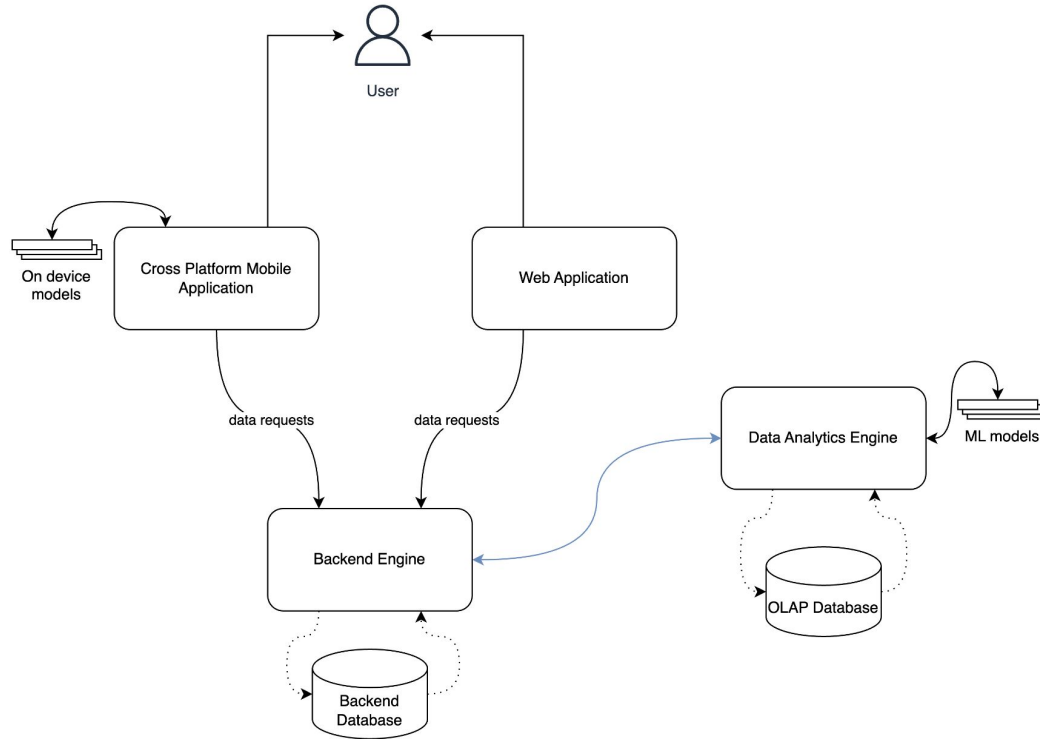
Solution Approach

Key Features and Functionalities

Non-functional Requirements

- Reliability
- Scalability
- Performance
- Traceability
- Security
- Service Availability (99.99%)

Solution Approach



Subsystems

1. Cross Platform Mobile Application
2. Web Application
3. Data Analytics Engine
4. Backend Engine

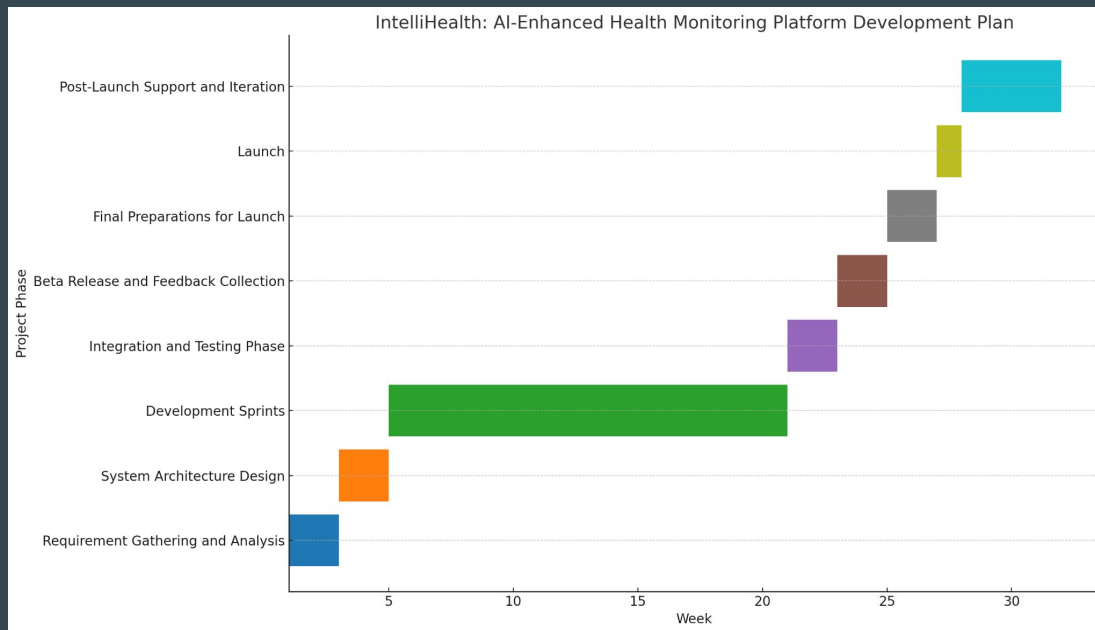
Project Plan

Summary of the project plan

- Agile Scrum
- Collaboration Tools
- Resource Plan
 - ◆ Core Development Team
 - ◆ Technical Resources
 - ◆ Infrastructure Requirements

Project Plan

Milestones and Deliverables Detailed Breakdown



Risk Management Plan

Risk Identification

Technical Risks

- Integration challenges with wearable devices
- Complexity in developing AI algorithms
- Data accuracy concerns

Operational Risks

- Inadequate user adoption
- Technical glitches
- Insufficient training data for AI models

Economic Risks

- Budget constraints
- Market fluctuations
- Increased competition

Risk Management Plan

Impact Analysis

1. Integration challenges with wearable devices

- Impact: User frustration and decreased engagement
- Likelihood: Moderate
- Severity: High

2. Data accuracy concerns

- Impact: Loss of credibility and improper health insights
- Likelihood: Low
- Severity: High

3. Insufficient training data for AI models

- Impact: Reduced accuracy of predictions
- Likelihood: Moderate
- Severity: High

Risk Management Plan

Risk Mitigation Strategies

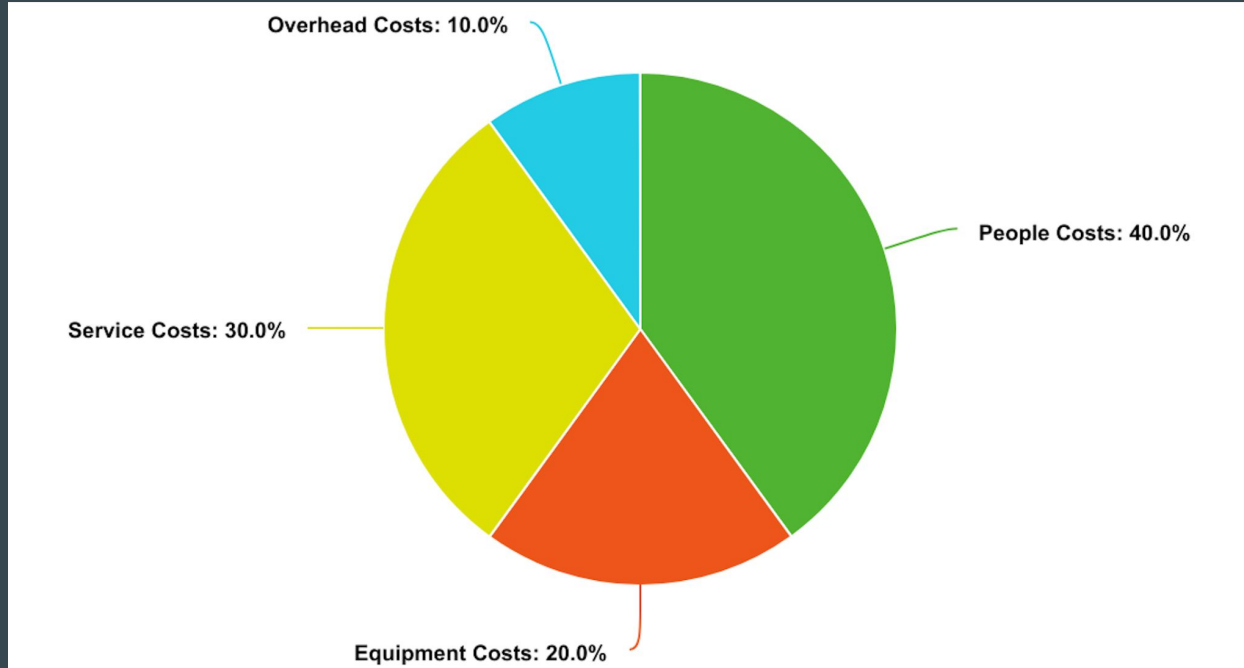
Integration challenges with wearable devices

To address integration issues promptly, conduct thorough compatibility testing and establish clear communication channels with manufacturers.

Data accuracy concerns

To ensure integrity, implement rigorous data validation procedures and invest in data quality assurance tools.

Budget Overview



Budget Overview

Detailed breakdown

Category	Budget Allocated
People Costs	CA\$400,000
Equipment Costs	CA\$200,000
Services	CA\$300,000
Contingency Reserve	CA\$100,000
Overhead Costs	CA\$100,000
	Total Budget: CA\$1,100,000

Conclusion

Summary of Key Points

- Market Justification
- Feasibility study
- Solution Approach
- Project Plan
- Risk Management Plan
- Budget Plan

Questions

