Business Case for KeanFit

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1.0 Introduction/ Background

In recent years, universities have increasingly emphasized student health and wellness as part of their commitment to holistic education. However, many students struggle to access fitness resources, stay informed about events, and adopt healthy habits due to a lack of centralized information. A comprehensive fitness website tailored for university students can bridge this gap, promoting a healthier and more active campus community.

2.0 Business Objective

Our business objective is the following:

- Improve awareness of campus health and wellness events by 40% leveraging targeted communications.
- Boost enrollment in exercise-related university classes by 15% by providing clear, accessible class information through the app.
- Integrate with Kean University's wellness and fitness programs, ensuring at least 80% of university fitness events are listed in the app.
- Complete 100% of planned test cases to validate functionality, usability, and performance.

3.0 Current Situation and Problem/Opportunity Statement

<u>Current Situation:</u> University fitness programs and resources are often dispersed across multiple platforms, making them difficult for students to find and utilize effectively. Also, limited awareness of events and fitness opportunities results in underutilization of gym facilities and fitness classes.

<u>Problem Statement:</u> Students lack a centralized and accessible platform for fitness resources, leading to decreased engagement and missed opportunities for promoting health and wellness.

<u>Opportunity Statement:</u> By creating a dedicated university fitness mobile app, we can increase awareness, accessibility, and participation in fitness-related activities, fostering a healthier campus environment.

4.0 Critical Assumption and Constraints

Assumptions:

- Necessary resources such as software, development tools, and access to campus fitness data will be available.
- Will actively contribute time and skills alongside academic responsibilities.
- University policies may allow access to relevant fitness and wellness event data for integration.

Constraints:

• Limited availability of developers, designers, and testers may affect development speed and feature implementation.

- Limited access to university data such as access to class schedules, student data, or event information may be restricted due to data privacy policies or Family Educational Rights and Privacy Act (FERPA) compliance.
- Limited access to physical Android devices may hinder thorough testing of platformspecific features, potentially leading to undetected UI/UX inconsistencies or OSspecific bugs.

5.0 Analysis of Option and Recommendation

Option 1: Develop a Dynamic Mobile App with Interactive Features

Building a fully interactive mobile app with engaging features tailored to user needs.

Pros: Provides a richer and more engaging user experience.

Cons: Requires more development time and expertise.

Option 2: Use Low-Code Platforms

Utilizing low-code or no-code platforms to accelerate development with minimal coding.

Pros: Quick deployment, reduces technical complexity, and is easy to maintain.

Cons: Limited customization and may struggle to scale.

Option 3: Focus on a Web App Instead of a Mobile App

Creating a web-based platform accessible on any device through a browser.

Pros: Easier to develop and accessible on all devices without platform-specific constraints.

Cons: Lacks offline capabilities and may be less engaging compared to native apps.

Recommendation

Option 1 aligns with the project's objective of creating an interactive and engaging platform. However, leveraging Option 2 can help expedite development and reduce technical overhead, ensuring a balance between functionality and efficiency.

6.0 Preliminary Project Requirements

1. Core User Features

- User registration and profile management
- Workout tracking and logging
- Personalized fitness plans
- Progress visualization
- Goal setting capabilities

2. Technical Requirements

- Mobile compatibility
- Single sign-on with university credentials
- Data privacy and security compliance
- Responsive design
- Integration with fitness devices/trackers

3. Fitness Tracking Capabilities

- Exercise library
- Calories and activity tracking
- Performance metrics monitoring
- Customizable workout routines
- Real-time progress reporting

4. Social and Engagement Elements

- Community challenges
- Friend connections
- Achievement badges
- Motivational notifications

5. University-Specific Integration

- Campus gym equipment tracking
- Class schedule synchronization
- Health service resource links
- Nutrition information from campus dining

6. Accessibility and Support

- Web Content Accessibility Guidelines (WCAG) 2.1 compliance: Essential for inclusivity. Focus on screen reader compatibility, keyboard navigation, sufficient color contrast, alternative text for images, adjustable font sizes, and captions/subtitles (if applicable).
- **Multi-Language Support:** Use professional translation, ensure culturally appropriate content, support right-to-left languages, and provide easy in-app language switching.
- **User Support:** Offer in-app help/FAQs, email support, (optionally) chat support and a community forum. Include an easy feedback mechanism.
- **Fitness-Specific Accessibility:** Provide audio cues for exercises, adjustable workout intensity, clear exercise instructions (with video demos if possible), and consider integration with assistive devices.

Key Technical Specifications

- Platforms: iOS and Android
- Authentication: University SSO
- Data Protection: FERPA/GDPR (Family Educational Rights and Privacy Act/General Data Protection Regulation) compliant
- Performance: Fast, lightweight application

7.0 Budget Estimate and Financial Analysis

Estimated Budget: \$0 (using free platforms)

8.0 Schedule Estimate

Sprint 1 2/05 - 2/26: Foundation & Core Features

Sprint 2 (2/27 - 3/27): Advanced Features & Integration

Sprint 3 (3/28 - 4/18): Additional Features

9.0 Potential Risks

- Risk: Delays in receiving content from gym staff due to communication breakdowns, unclear responsibilities, or a lack of established working relationships.
 - Mitigation: Foster positive working relationships with gym staff through regular communication, appreciation for their contributions, and collaborative problem-solving. Ensure that both the app development team and the gym staff have a clear understanding of their roles and responsibilities regarding content creation and delivery.
- Risk: Technical issues during development leading to security vulnerabilities and privacy breaches.
 - o Mitigation: Perform penetration testing to simulate real-world attacks and identify weaknesses. Use automated vulnerability scanners.
- Risk: Low student adoption rate due to a lack of perceived value or differentiation compared to existing fitness solutions (free apps, gym memberships, etc.). Students may not see a compelling reason to use this app.
 - Mitigation: Develop a clear and concise value proposition that highlights the app's unique benefits and how it addresses student needs better than alternatives. Emphasize what makes the app special.

10.0 Exhibits

N/A