MYFitness Mobile Application

Team 2:
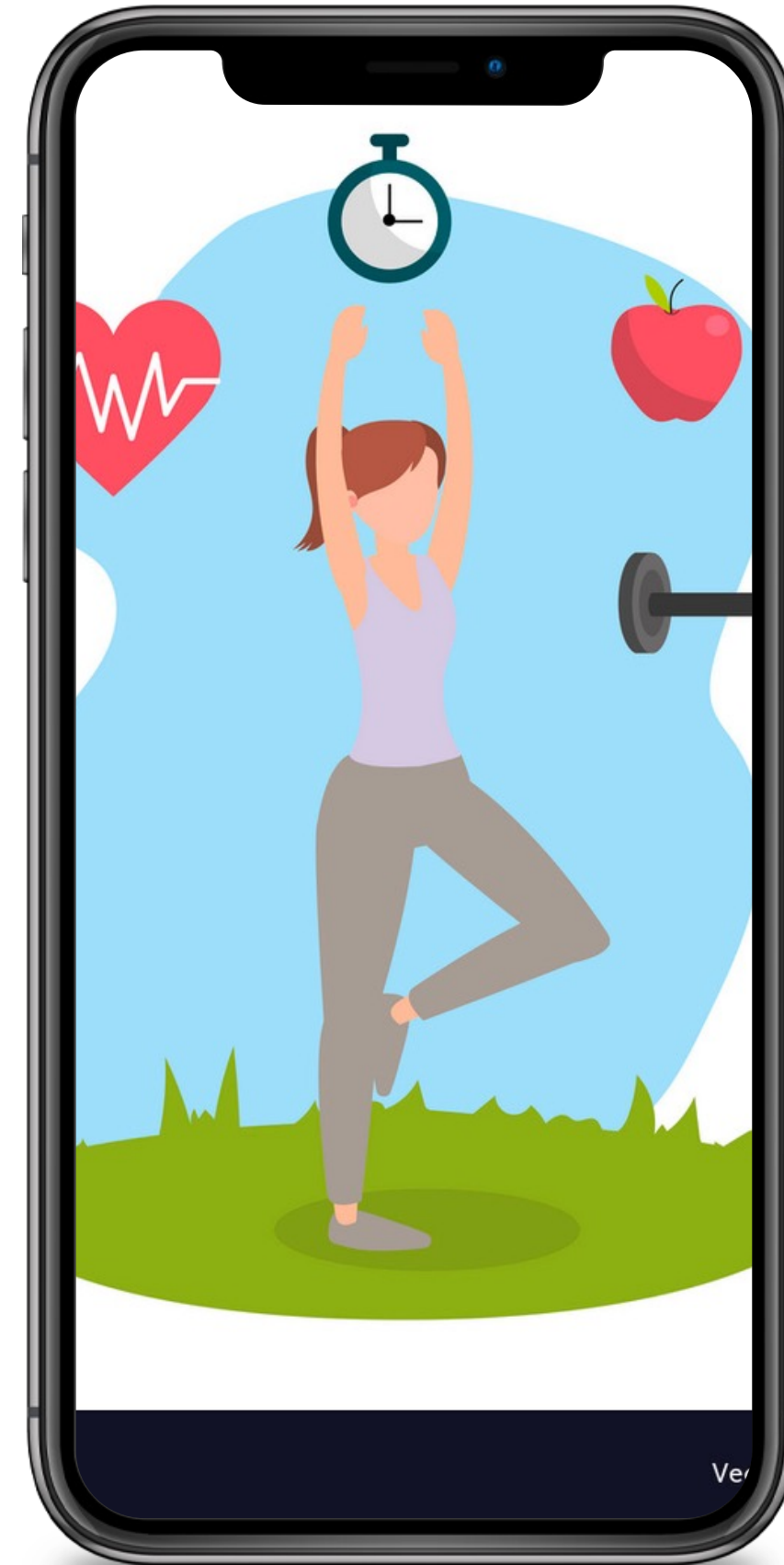
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Summary of Project

A mobile application that provides users with personalized workout plans and tracks their progress, delivering a comprehensive and convenient solution for fitness and wellness.
It is designed to help people track their fitness goals and progress. It is often used to monitor physical activity, nutrition, weight and other related health metrics.

Main Feature:
- **Exercise Tracking**
  - Users can log their workouts, set goals, and track their progress over time.
- **Nutrition tracking**
  - Users can log their meals and snacks, monitor their calorie intake, and track their macronutrient and micronutrient intake.
- **Weight tracking**
  - Users can monitor changes in their weight over time and set goals for weight loss or gain.
- **Social features**
  - Some myfitness apps allow users to connect with friends and family members to share progress, compete in challenges and offer support and motivation.

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Scope Summary

Start Date: February 10th, 2023 → **End Date: May 10th, 2023**   Estimate Budg
$100,000

DELIVERABLES	MILESTONE	TECHNICAL REQUIREMENTS
• Initial Project Strategy Report • Budget Report • Progress Report • Beta Product Report • Test Result Report • Design Samples for Training • Final Release • Software/ Hardware Requirements • Post Release Survey	• Budget Approval(February 10th) • Selecting Software and Hardware Platforms(February 20th) • UI Design Approval (February 25th) • Developing Key Features (March 15th) • Application Testing Phase(March 20th) • Additional Features(April 4th) • Application Testing Phase 2(April 7th) • Application Pilot Run(April 15th) • Minor Changes approved by Sponsors(April 25th) • Final Deployment on IOS and Android OS(May 10th)	• MYFitness applications follow and comply with the standards and technical requirements (security and architectural requirements). • MYFitness application supports IOS and Android operating systems on mobile phones. • MYFitness application uses MySQL data architecture hosted on AWS cloud • MYFitness application UX/UI design follows the design standard applying React • MYFitness applications encrypt data, using high-level authentication, using the principle of least privilege, secure APIs, and penetration testing to ensure security.

Stakeholders

- **BUSpark**

- **Exercise Equipment Company**

- **MYFitness Application Team**

    - Development Team

    - UX/UI Design Team

    - Testing and QA Team

- **Fitness Clubs**

Top 10 Risks

- Data Privacy and security
- User Safety
- Technical Failures
- Competition
- Cash Flow
- Compliance with laws and regulations
- Cyber Attacks
- Risk inherent in technology
- Health Compliance
- User Adoption

3 Top Risks

Data Privacy and Security

User Safety

Competition

Hacking attempts, ineffective encryption mechanisms, and insider threats. Unauthorized access and data leaks

Misconfigured apps, user error, and external dangers

similar features across apps, shifting market trends

Crisis--External Unpredictable Risk

Data Privacy and Security Threats

TRIGGERS

Hacking Attack in Early Stage

(After 1st Phase of APP test Lanch)

Possible Cause:

- Insider threats.
- Interruption of ongoing operations
- Destruction of hardware and software
- Release of sensitive business information
- The exposure of the PII of members, clients, employees, vendors or partners
- Ineffective encryption mechanisms
- Unauthorized access and data leaks
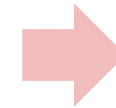
Data Breaches

Personal Identifying Information (PII)

Social Security number,

Driver's license number,

Bank account number

Credit or Debit card details,

Home Address or Email address,

Medical or Health information.

According to **Capita**, 80% of data breaches involve personally identifiable information at a cost of $150 per record.

Resolution
Mitigation

Activities Before Crisis

- Implementing measures such as encryption, access controls, and regular security audits to reduce the risk of data breaches or unauthorized access to sensitive user information.
- Third-party service for Penetration Testing

Impact

- **Cost Wise**
  - It took additional costing of $1000 to arrange the professionals to check the data leakage
  - Training cost to the members while handling the user data - $500
- **Time Wise**
  - Delay of 7-8 days after Application Testing Phase
  - Training for the employees would need additional 2-3 days.

Activities After Crisis

- **Contingency Plan**
  - Identify data security risks
  - Build a risk management strategy
  - Continue Data encryption, regular security audits, and training on best practices for data security
  - Backup and recovery
  - Review the number of members or clients and employees that could be affected by a data breach
  - Review the potential cost to restore systems and data when calculating how much coverage the business needs

Informational Webpage

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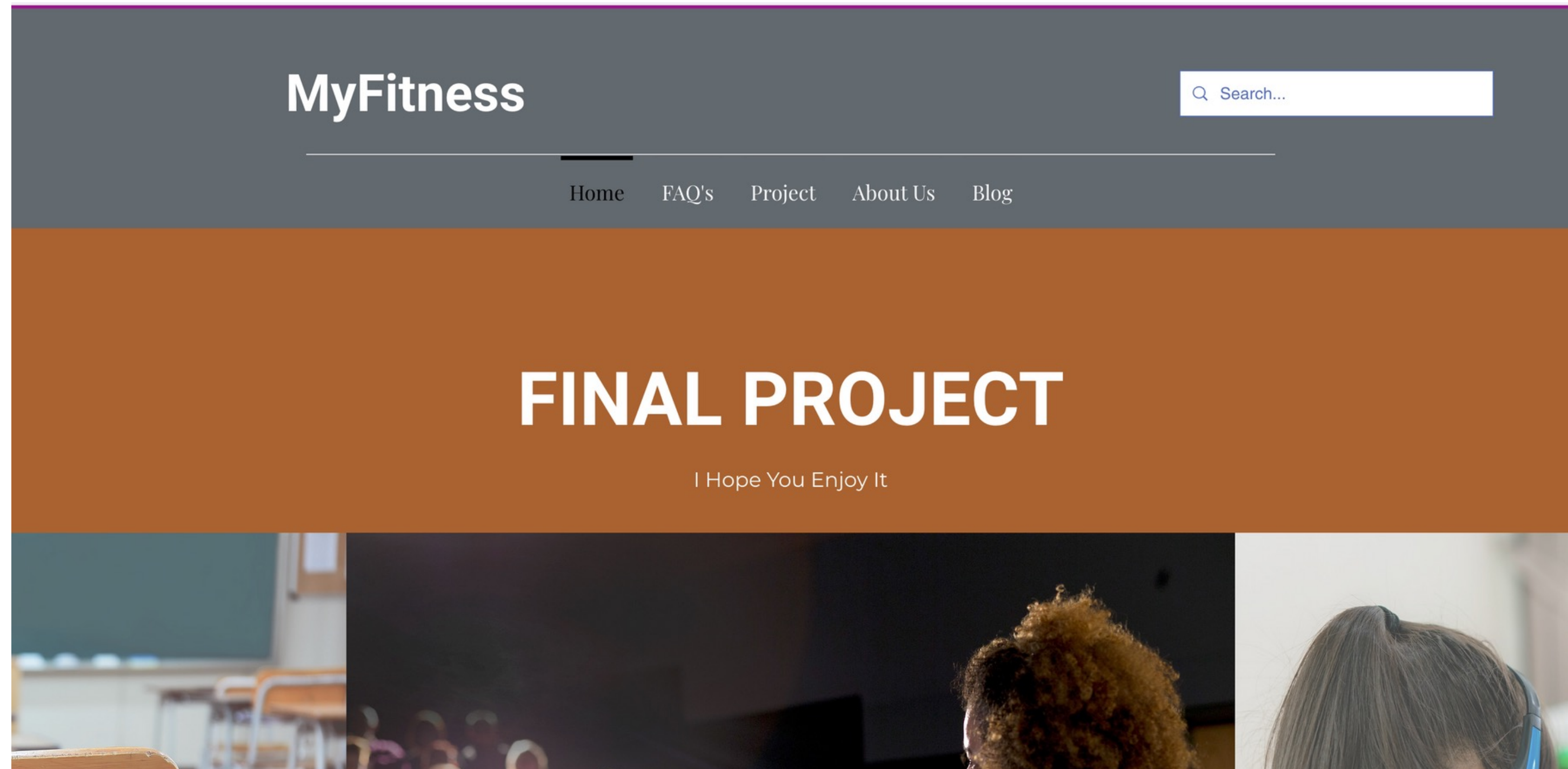
Lessons Learned

- Making a health and fitness app taught us:
    - put the user first, start simple,
    - prioritize data security
    - routinely solicit user feedback.
    - In order to satisfy customer demands and expectations, we intend to apply these lessons in the creation of future apps.
- Collaboration: discover successful teamwork techniques, task delegation techniques, and effective communication techniques.
- Time Management: Become proficient at time management, task prioritization, and meeting deadlines.