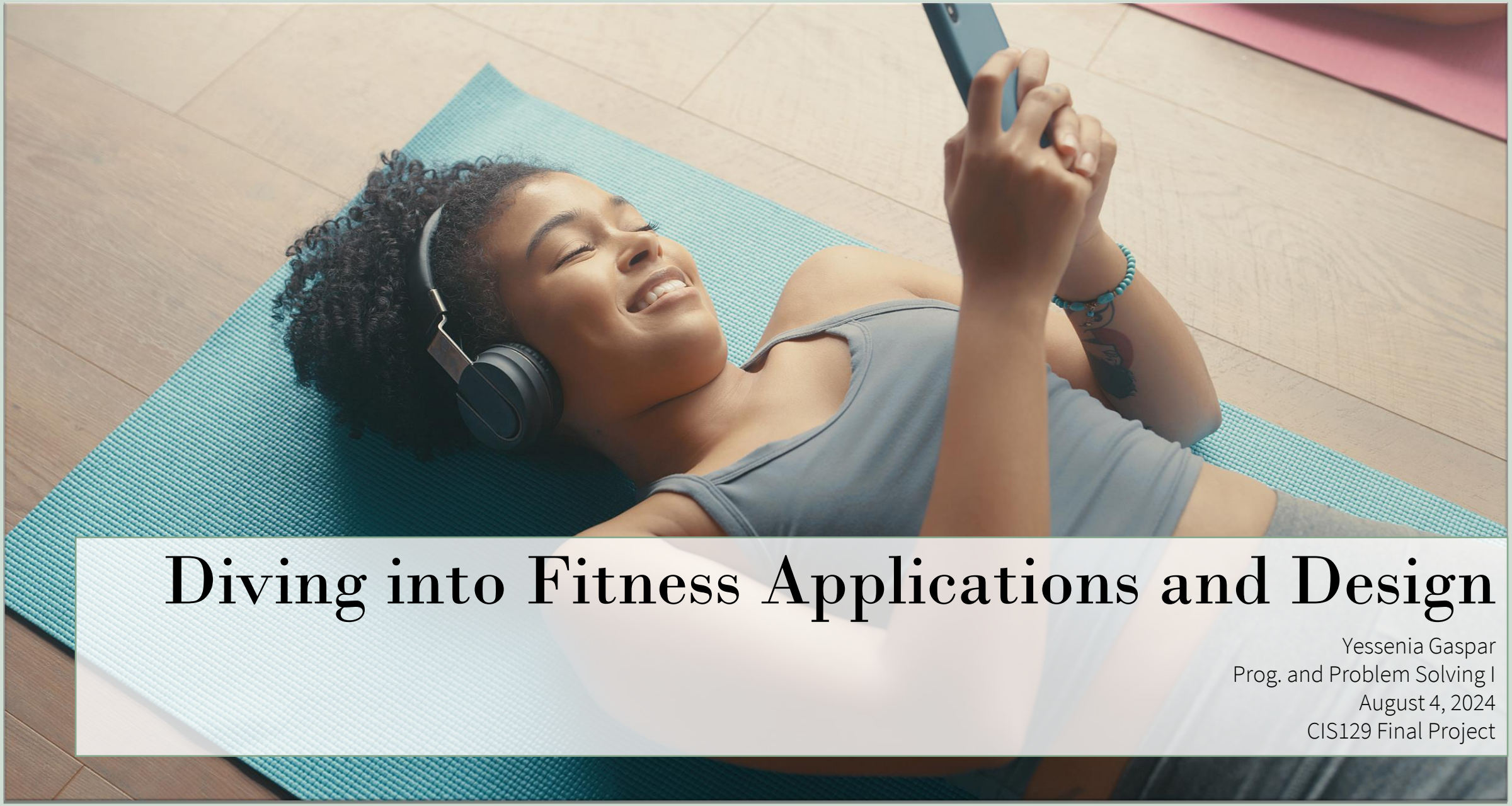

Diving into Fitness Applications and Design

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Introduction to Fitness Applications

Selecting Fitness apps that can tailor to everyone may be difficult. With different goals, app interfaces and motivational tactics. How can we create one that adapts and reflects the needs of all?

In this final, I have researched tactics that may help keep users engaged and motivated in fitness. Applications have the potential to engage and stimulate users to begin and continue their fitness journey.

Elements of importance will be

- ✓ *Sustained* Motivation
- ✓ User experience

Personally, I found interest in this topic to find ways that may help myself, and others, be empowered to embrace fitness. Involving technology can help begin and maintain rewarding fitness routines. With this project, Python will help prove there are ways fitness applications can be improved.

What applications exists and what features are included?

	FitNotes Exercise Based	FatSecret Diet Based	MyNetDiary Exercise/Diet Based
Gamification – Badges, Tokens, etc.	✗	✗	✗
Challenges/Rewards	✗	✗	✗
Track Exercise Progress/Goals	✓	✗	✓
Profile User Data - Social	✗	✓	✓
Feedback – Social Integrations	✗	✓	✓

Existing App Overview

Exercise applications without social integrations may isolate users from the community and lack general support.

+

Existing exercise and diet applications that lack gamification may result in discontinued app use.

+

If applications hastily added more features, they must ensure error handling to prevent crashes and bugs

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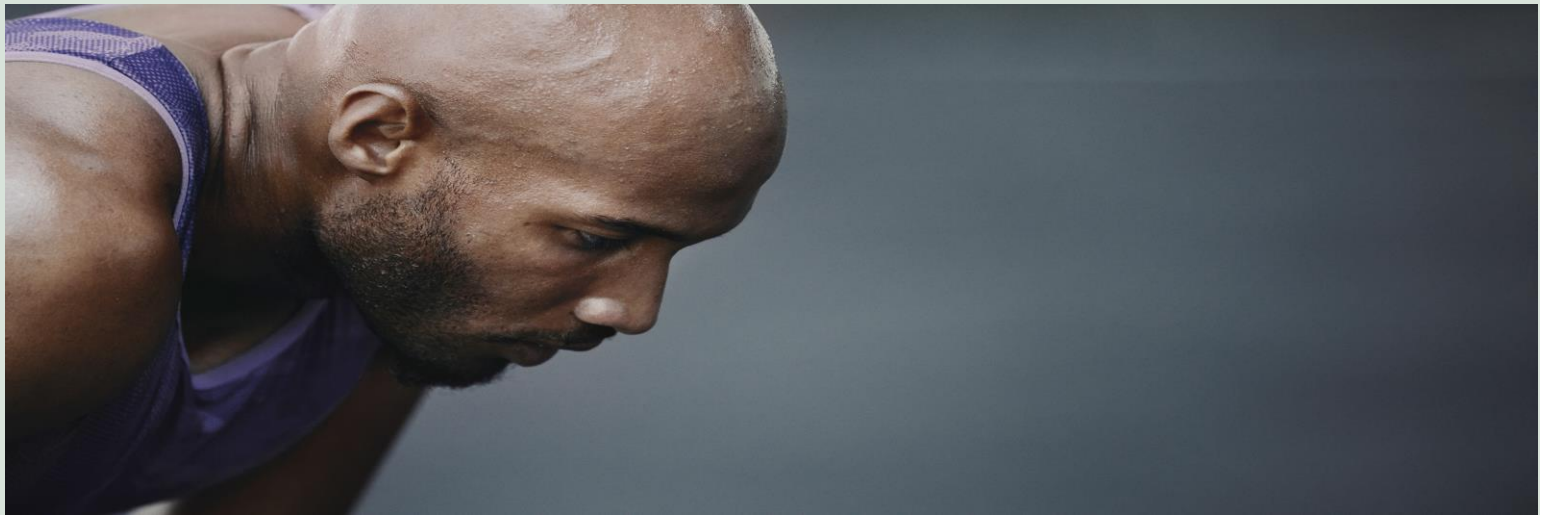
Discouraging Issues:

- Lack of Personalization
- Inadequate Engagement
- Lack of Feedback and Recognition
- Poor and unmanaged Interface Design



How is this a relevant?

Previous applications did not implement gamification to make fitness more engaging. Python code can be used to create systems that include points, badges, and leaderboards. Improving **motivation**.

Enhanced customization for user data, settings, and notifications. Create convenient ways to monitor and improve health. Improving **engagement**.

Traditional methods of tracking fitness can be mundane and lack engagement, while a new fitness app can offer gamification, social interactions, and real-time feedback to keep users interested.

Summary of Journal Findings

Research Overview

- Gamification: This tactic has shown to correlate to motivation and consistency. It' s been observed that this creates behavioral motivation. (Faiza A)
- Digital Engagement: Tactics included involved tracking rewards, progress, achievements, and game-like challenges showed emotional engagement. Thus, creating enhanced motivation. (Faiza A)
- Social Integrations: 'Users that experience apps that provide social value have higher intentions to continue using the app.' (Tu)
- Main Difference: "…Consumer whose aim is to reduce boredom can be more effectively motivated by gamified fitness app focusing on emotional value (i.e., making it fun); on the other hand, a consumer aiming to making physical activity a long-term habit may better achieve her or his goal by using fitness app focusing on social value (i.e., making it social.)." (Tu)

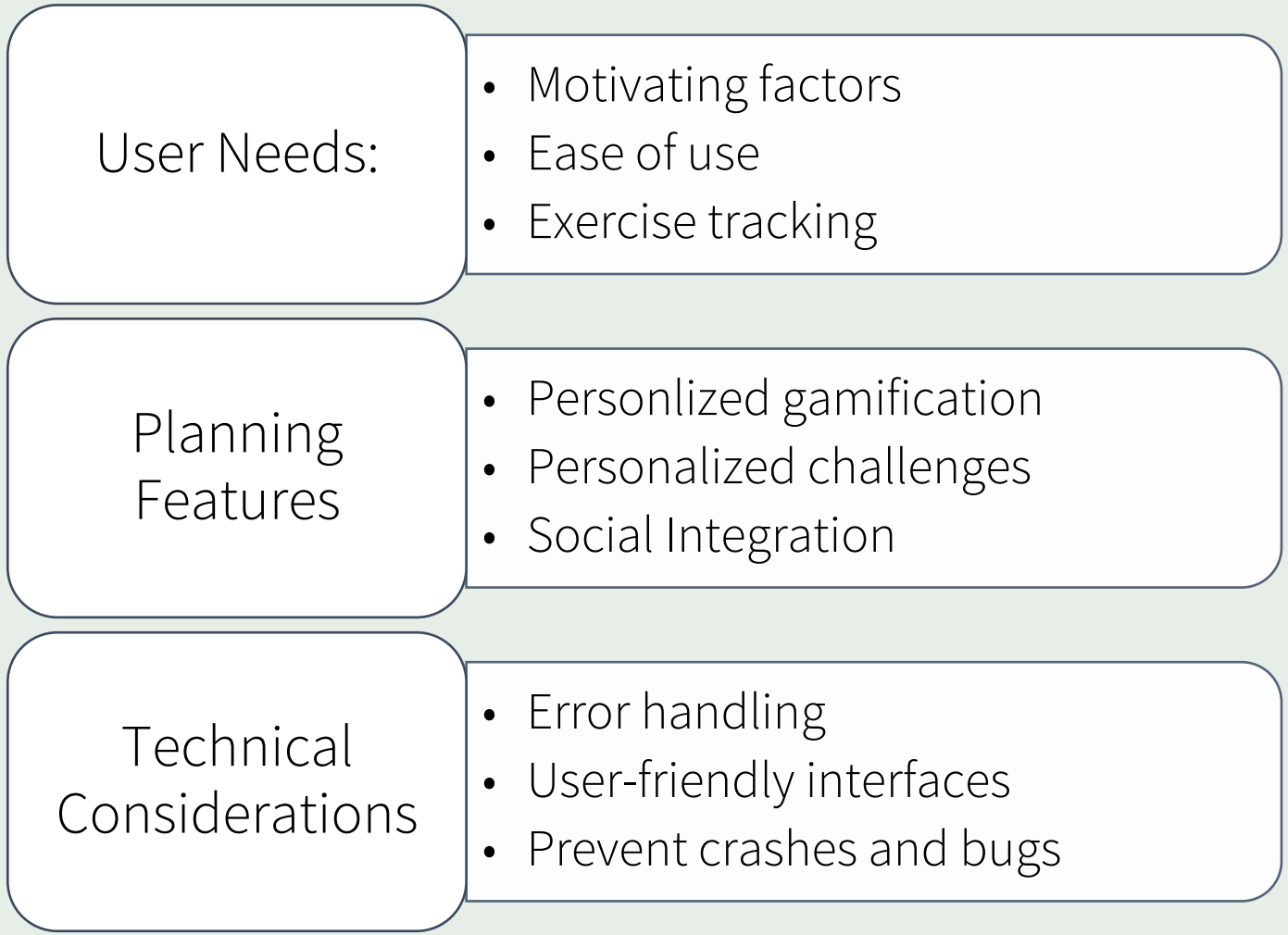
Real-World Applications

Using Python concepts, we can create general code snippets to create:

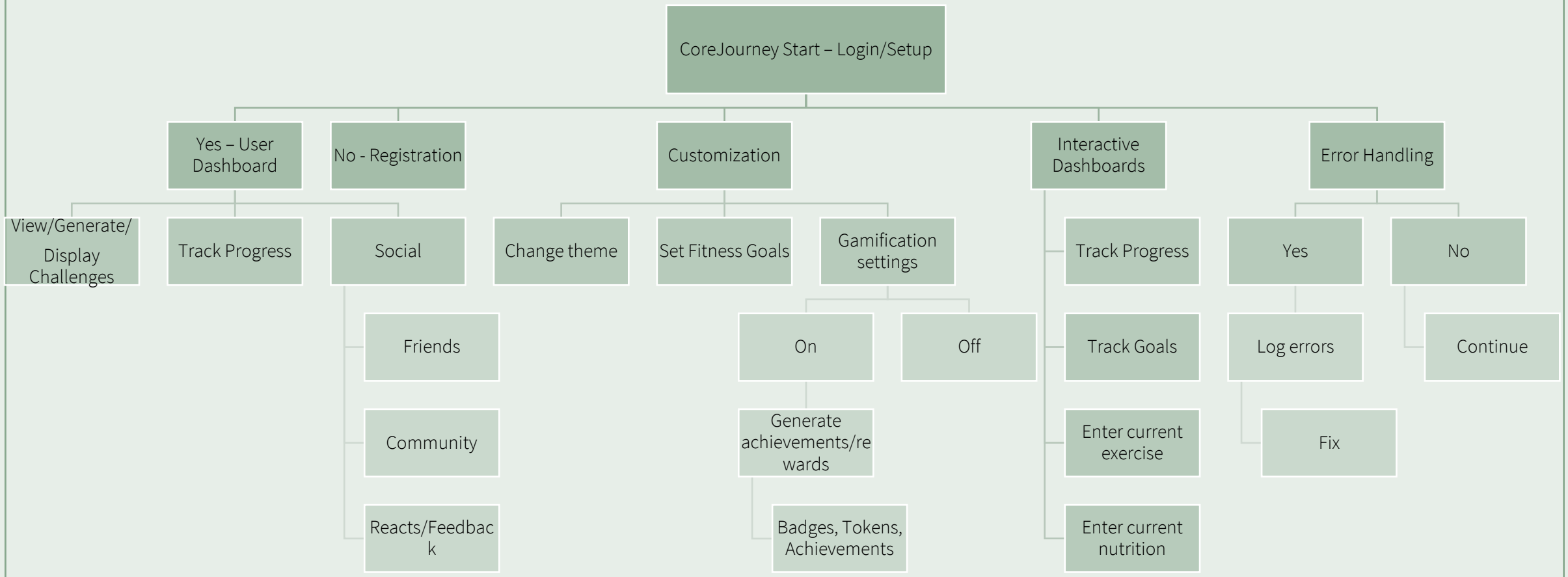
- Interactive Personal Profile Integrations
- Gamification
- Social Integrations

Design Approach

Let’s design a flowchart to organize these three elements



CoreJourney Design Proposal



Open Questions

Questions		Possible Answers
Based on research, there is a difference between users using long term applications when using gamification versus social networking	*Would this be the same for other real-world applications?*	Even though the research was based on fitness habits. This may be true for other ventures like 'to-do lists' or 'calendar/planning' applications
If we incorporated AI coding and syntaxes. This could either hinder or help fitness applications	*How could AI be implemented in the future for fitness applications? And how could AI benefit users?*	It would be interesting to see AI be used to help create or form exercise routines.
Some of these proposed integrations seem to hold a lot of information.	*If we incorporate the proposed elements, what other error-handling and preventative measures would we need to learn?*	This may be a huge problem if coders are not careful. Perhaps there are more import options to include in Python…(?)

Thank you

Citations

Faizah A, Hardian AFA, Nandini RD, Handayani PW, Harahap NC. "The Influence of Incentive-Based Mobile Fitness Apps on Users' Continuance Intention with Gender Moderation Effects: Quantitative and Qualitative Study." 6 May 2024. Proquest.com. Ed. K Adapa. Webpage. 3 August 2024. <https://www.proquest.com/docview/3066835846/fulltext/B850B2FD63C74866PQ/1?accountid=13194&sourcetype=Scholarly%20Journals>.

Tu, Rungting. "Walking for fun or for "likes"? The impacts of different gamification orientations of fitness apps on consumers' physical activities." Sport Management Review 22.5 (2019): 682. Article. 3 August 2024. <https://eds.p.ebscohost.com/eds/pdfviewer/pdfviewer?vid=0&sid=ce3382e1-c079-4c89-a6e9-40b325ca7fbf%40redis>.