Project Proposal

13016215 Software Engineering Principle

Software Engineering Program

Faculty of Engineering, KMITL

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Habit tracker

Project Description:

Overview:

Our goal is to develop a comprehensive Habit Tracker application that empowers users to establish, track, and maintain positive habits effectively. This app aims to provide a user-friendly interface coupled with a range of features to cater to diverse habit-tracking needs. The app will use Qt as the interface and ZODB as the database.

Key Functionalities:

1. Habit Logging and Customization: Users can effortlessly add and customize various habits according to their frequency - daily, weekly, or monthly. The app allows flexibility in scheduling, enabling users to set personalized goals for each habit.

2. Reminders and Notifications: Implement a reminder system where users can receive customizable notifications to remind them at specified times or intervals.

3. Progress Tracking and Analytics: Visual representations such as graphs and statistics showcase users' progress over time, along with customizable, ever-growing persona, motivating users to consistently

maintain their habits. The app offers insights into streaks, statistics, and completion rates, along with analysis based on the statistics.

4. Social Sharing and Community Integration: The app allows users to share their progress for encouragement.

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Research Phase:

Identify Target Audience:

Determine the demographics and preferences of your potential users.

Market Research:

Analyze existing habit tracker apps to understand their features, strengths, and weaknesses.

Planning Phase:

Define Core Features:

List down the essential functionalities the app will offer, such as habit creation, tracking, reminders, etc.

Wireframing/Prototyping:

Create wireframes or prototypes to visualize the app's layout and user flow.

Development Phase:

Create a Development Plan:

Break down the project into tasks and set milestones to track progress.

Frontend Development:

Develop the user interface (UI) of the app based on the prototype using Qt

Backend Development:

Implement the backend logic for the key features.

Object development:

Implement classes and objects of the application.

Database Setup:

Database planning:
Plan on what classes and objects will be saved into the database

Database implementation:
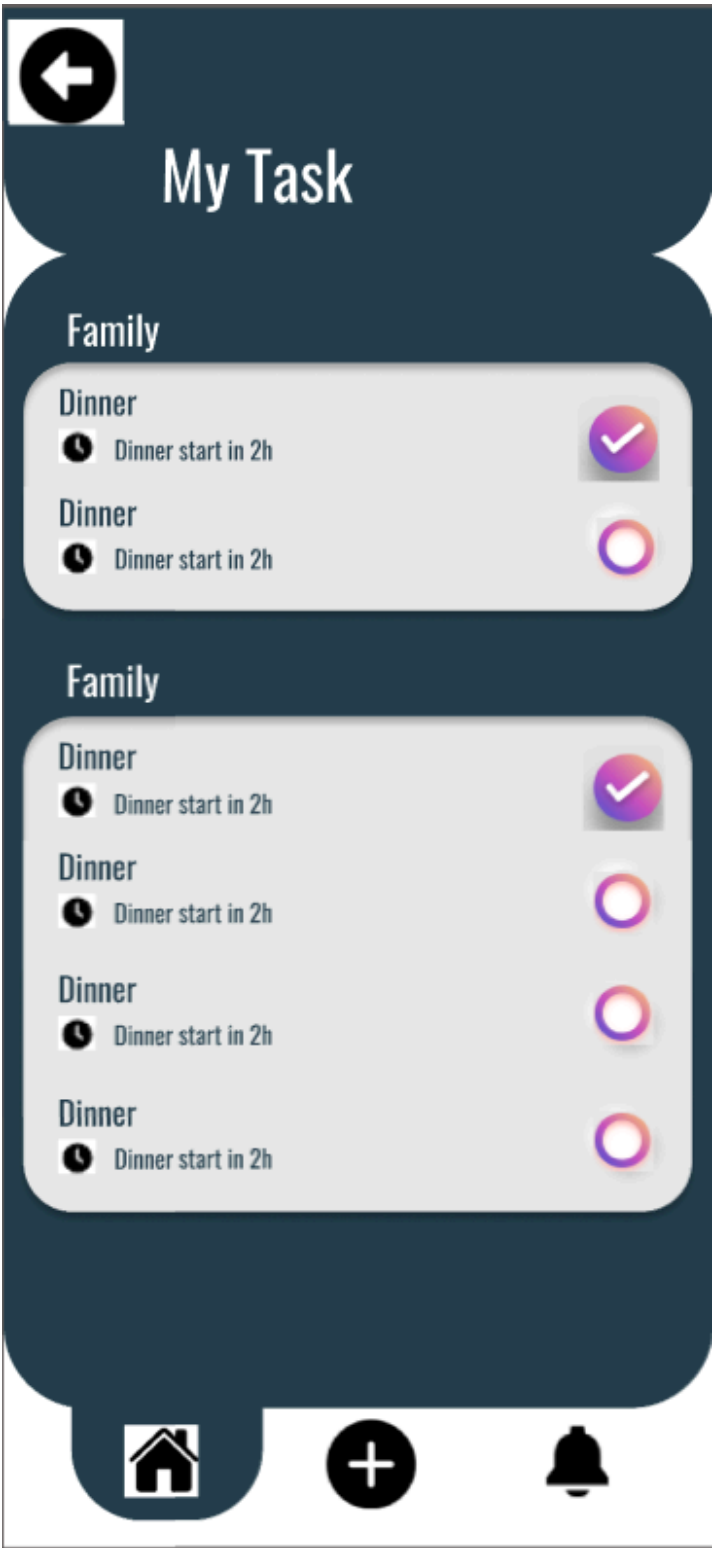Implement a database system using ZODB and persistent

Testing:

Conduct extensive testing (unit tests, integration tests, usability tests) to ensure the app functions as expected and is bug-free.

Draft UI design

Screen 1

Choose Tag for Your task

Family	News	Health
Urgent	Friend	Business
Personal	Education	Trip

Set Reminder   Tracking Progress

Others

ADD Task

Screen 2

	ⓐ	Name	Duration	Start	Finish	Predecessors
1		Start	0 days?	1/10/24 8:00 AM	1/10/24 8:00 AM	
2		⊟ Research Phase	14 days	1/10/24 8:00 AM	1/29/24 5:00 PM	1
3		Identify Target Audience	7 days	1/10/24 8:00 AM	1/18/24 5:00 PM	
4		Market Research:	7 days	1/19/24 8:00 AM	1/29/24 5:00 PM	3
5		⊟ Planning Phase	8 days?	1/10/24 8:00 AM	1/19/24 5:00 PM	1
6		Define Core Features	1 day?	1/10/24 8:00 AM	1/10/24 5:00 PM	
7		Wireframing/Prototyping	7 days?	1/11/24 8:00 AM	1/19/24 5:00 PM	6
8		milestone1	0 days	1/29/24 5:00 PM	1/29/24 5:00 PM	2;5
9		⊟ Development Phase	11 days	1/30/24 8:00 AM	2/13/24 5:00 PM	8
10		Create a Development Plan	1 day	1/30/24 8:00 AM	1/30/24 5:00 PM	
11		Frontend Development	7 days	1/31/24 8:00 AM	2/8/24 5:00 PM	10
12		Backend Development	7 days	1/31/24 8:00 AM	2/8/24 5:00 PM	10
13		Object development	3 days	2/9/24 8:00 AM	2/13/24 5:00 PM	11;12
14		milestone2	0 days	2/13/24 5:00 PM	2/13/24 5:00 PM	9
15		⊟ Database Setup	6 days	2/14/24 8:00 AM	2/21/24 5:00 PM	14
16		Database Planning	1 day	2/14/24 8:00 AM	2/14/24 5:00 PM	
17		Database implementation	5 days	2/15/24 8:00 AM	2/21/24 5:00 PM	16
18		milestone3	0 days	2/21/24 5:00 PM	2/21/24 5:00 PM	15
19		Testing	1 day?	2/22/24 8:00 AM	2/22/24 5:00 PM	18
20		Finish	0 days	2/22/24 5:00 PM	2/22/24 5:00 PM	19