TASKSNAP JOURNAL - A PRODUCTIVITY TRACKER 2.0

BITS ZC4999T: CAPSTONE PROJECT

BY

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CAPSTONE PROJECT WORK CARRIED OUT AT

HCLTECH, NAGPUR

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE
PILANI (RAJASTHAN)

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BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI
WORK-INTEGRATED LEARNING PROGRAMMES DIVISION

BITS ZC499T: Capstone Project Mid-Semester Progress Evaluation Sheet

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Capstone Project Title: Tasksnap Journal - A Productivity Tracker 2.0

CONTENT

- Details of the work done
- Details of the work yet to be done
- Evaluation
- Details of the Examiner and Mentor

DETAILS OF THE WORK DONE

1. Application Design and Prototyping

- **Initial Concept:** The project started with low-fidelity sketches to establish the basic layout for the application's core screens (Dashboard, Update Info, Productivity, To-Do List).

- **High-Fidelity Mockup:** The initial sketches were developed into a detailed digital mockup. This process finalized the app's modern aesthetic, color scheme, and typography before development began.

- **Interactive Prototype**: A clickable prototype was built using Figma to test and validate the user flow and overall design, ensuring a positive user experience.

2. Core Application Architecture

- **Technology Selection**: The application is built with Python and the CustomTkinter library. This stack was chosen for its capability to produce modern, cross-platform user interfaces and for its flexible licensing.

- **Modular Codebase**: The project is organized with a clean, scalable code structure. Each screen is contained in its own module within a views package, a central theme.py file manages all styling, and main.py serves as the primary application controller.

3. User Interface Implementation

All planned UI screens have been fully constructed and are visually complete.

- **Dashboard**: The main hub of the application is feature complete. It includes a dynamic greeting that changes with the time of day, an inspirational quote fetched from a live API, and functional navigation cards.

- **Update Info Screen**: A detailed, scrollable form for managing user profile information has been built. It includes custom inputs for shift times and week-offs and is fully integrated with the theme system.

- **Productivity Screen**: The new screen features a clean, grid-based layout and an integrated dropdown menu for secondary actions.

- **To-Do List & Screen Time Screens:** The UI for the final two screens has been designed and implemented as placeholder views, ready for back-end logic.

4. Advanced UI Features

- **Dynamic Theming**: A fully functional light/dark mode toggle has been implemented, which instantly updates the appearance of the entire application.

- **Custom Styling:** The application uses the "Rubik" font and custom, dynamically color-tinted icons to create a unique and cohesive visual identity.

- **Responsive Design**: The application window maintains a fixed aspect ratio, and fonts scale dynamically, ensuring the UI remains well-proportioned at all sizes.

PLAN OF WORK YET TO BE DONE

With the front-end user interface now complete, the next phase of the project will focus entirely on back-end development. The primary goal is to implement the application's logic and connect it to the existing UI.

Milestone 1: Data Persistence and Configuration

- **Objective**: Establish a system for saving and loading all user data and application settings.

- **Deliverables**:
    - *Data Storage Model*: Implement functions to read from and write to local data files (e.g., CSV, JSON) for storing user profiles, productivity data, and to-do list items.

    - *"Update Info" Backend*: Connect the "Save Changes" button on the UpdateInfoView to the data storage model to enable saving and loading of user details.

Milestone 2: Core Feature Logic Implementation

- **Objective**: Make the primary productivity and task management features fully functional.

- **Deliverables**:
    - *Productivity Tracker Backend*: Implement the logic for the "Update" and "Clear" buttons. This includes the calculations for daily productivity based on the task complexity inputs.

    - *To-Do List Backend*: Develop the core functionality for the To-Do List screen, including the logic for adding, completing, and deleting tasks.

Milestone 3: Secondary Feature and External Integration

- **Objective**: Build out the functionality for the advanced features located in the productivity screen's menu.

- **Deliverables**:

- *Summary View Logic*: Implement the "View Summary" feature. This will involve creating a new window that reads saved data, performs calculations, and displays a productivity summary.

- *Miscellaneous Notes Logic:* Connect the "Miscellaneous" menu option to a function that opens a simple text editor for saving and loading daily notes.

- *Email Integration*: Integrate the email sending logic. The "Send Email" menu option will trigger a function to format the saved productivity data into a report and send it via SMTP.

Final Milestone: Testing and Packaging

- **Objective**: Ensure the application is stable and bug-free

- **Deliverables**:
  - *Full-Stack Testing*: Conduct thorough testing of all features, including data saving, calculations, and email functionality, to identify and resolve any bugs.

  - *Executable Build*: Use a tool like PyInstaller to package the complete Python application into a single, standalone executable file for easy deployment.

EVALUATION

CAPSTONE PROJECT PROGRESS EVALUATION *(Please put a tick (✔) mark in the appropriate box)*

EC No.	Component	Excellent	Good	Fair	Poor
1.	Capstone Project Outline	✔			
2.	Work Progress & Achievements	✔			
3.	Initiative and Originality	✔			
4.	Documentation & Expression	✔			
5.	Research & Innovation	✔			
6.	Relevance to the work environment		✔		

DETAILS OF EXAMINER AND MENTOR

	Mentor	Additional Examiner
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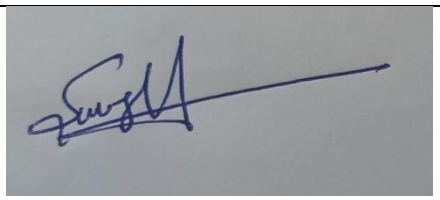
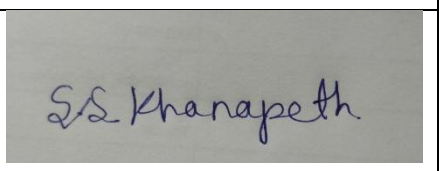
Signature		
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