CANALYS

TIME IS IN YOUR POCKET

**5. Design and Implementation**

**5.1 Algorithm for Scheduling**

5.1.1 Step-by-step breakdown of the scheduling algorithm. 5.1.2 Consideration of time complexity and optimization techniques. 5.1.3 Adapting the algorithm for varying time scales (weeks, months, years).

**5.2 Data Structures**

5.2.1 Choice of data structures for efficient representation of schedules. 5.2.2 Trade-offs between different data structures considered. 5.2.3 Scalability considerations for handling large datasets.

**5.3 Code Snippets**

5.3.1 Additional code snippets illustrating edge cases and error handling. 5.3.2 Commentary on code maintainability and readability. 5.3.3 Integration of unit tests within the codebase.