Designing a Wellbeing-Focused Digital Time Management Application

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OVERVIEW

Introduction

Effective time management is closely linked to psychological wellbeing. Yet most existing digital tools focus on productivity and task completion. It ignores the emotional and cognitive factors that affect whether people sustain healthy routines.

> *Many tools fail to account for fluctuating motivation, energy levels, or stress, leaving users disengaged or overwhelmed.*

AIM

Project Aim

To design and evaluate a wellbeing-focused, adaptive time management application that supports users in organising tasks and managing time in a way that is both practically useful and psychologically sustainable.

LITERATURE

Research Gaps

- Short-term focus: studies measure performance, not long-term wellbeing
- Productivity bias: tools prioritise efficiency over emotional sustainability
- Underserved groups: working students and caregivers are poorly supported
- Fragmented AI: productivity and mental health AI rarely integrate

OBJECTIVES

Project Objectives

1 Research & Analysis
Literature review on time management, SRL, and wellbeing tools

2 User-Centred Design
Low-fidelity prototype: schedule creation and revision planning

3 Prototype Dev.
Rule-based scheduling simulating AI personalisation features

4 Testing & Evaluation
Structured usability testing with questionnaire-based feedback

METHODS

Methodology

Philosophy Pragmatic with a real-world focus	**Approach** Deductive — theory-informed
Strategy Iterative development	**Time Horizon** Cross-sectional evaluation

SYSTEM

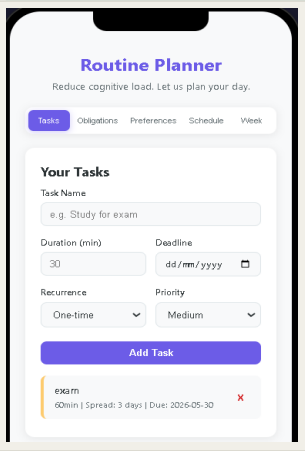
Implementation

Built as a browser-based tool using HTML, CSS, and JavaScript with a rule-based scheduling engine and dynamic task interface.

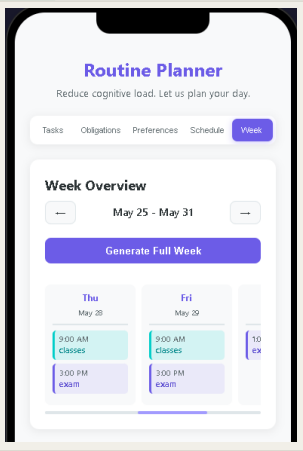
HTML | CSS | JavaScript | Rule-based logic | Schedule generation | Dynamic UI

APPLICATION

App Interface



Task input interface



Generated schedule view

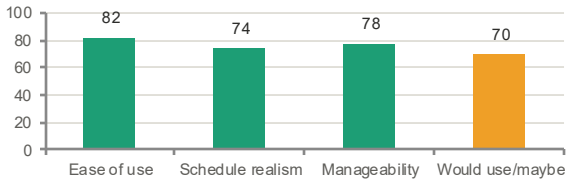
RESULTS

Key Findings

Easy	Realistic	Helpful
Interface rated easy to use	Schedules perceived realistic	Reduced feelings of overwhelm

USABILITY

Evaluation Results



USER FEEDBACK

Qualitative Themes

> *"Clear and simple interface helpful for organising tasks and visualising daily time."*

> *"Schedules were a useful starting point; users adapted rather than followed rigidly."*

LIMITATIONS

Limitations & Future Work

Limitations:

- Long-term impact could not be measured
- Small sample limits generalisability of findings
- Schedules lacked flexibility for variable energy levels

Recommendations:

- Adaptive / AI-driven scheduling responding to user behaviour
- Calendar integration for longer-term planning views
- Longitudinal studies tracking wellbeing over extended use

A simple, user-focused tool can support planning and reduce overwhelm. Realistic, flexible, user-centred design is key to sustainable time management support.

EVALUATION

Evaluation Design

Participants used the app to create schedules from real daily tasks, then completed a structured questionnaire covering:

- Usability and ease of navigation
- Functionality of core scheduling features
- Realism and manageability of generated schedules
- Likelihood of real-world adoption
- Open-ended qualitative feedback

Ethics: anonymous, voluntary, GDPR-compliant, right to withdraw at any time.

DESIGN

Key Design Decisions

- Simplicity over complexity — minimalist interface to reduce cognitive load
- Task-based structure — aligned with self-regulation and planning research
- User agency preserved — schedules as flexible guides, not rigid rules

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