Hacksome Thorns

- Problem Statement ID – 06

- Problem Statement Title – Frictionless productivity solution
for students

- Team Name (Registered on google forms): FocusForge

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EMBER

IDEA TITLE

FocusFlow – Frictionless Productivity OS for Students

- **Proposed Solution:**

-A browser-based mini operating system that merges task planning, note-taking, PDF summarisation and distraction-reducing features into one seamless interface.

-Removes friction from student workflows by integrating all tools in a single dashboard, requiring no logins or installations.

- **Innovation and Uniqueness:**

-Focus Mode with simplified UI and tab-switch recovery.

-Micro-Coach AI nudges users when idle or distracted.

-Drag-drop planner with priority tags, a GitHub-style heatmap, and motivational bars.

-Smart rescheduling of forgotten tasks with alert cards.

TECHNICAL APPROACH

-Frontend Technologies: HTML (structure), CSS (styling), JavaScript (interactivity)

-PDF Handling: pdf.js library for parsing and summarization

-Data Storage: Uses browser localStorage for offline data persistence

-Notifications: Built-in SpeechSynthesis API for audio alerts and nudges

-Offline First: Works without an internet connection; no signup required

-Behavioral Learning: Adapts to student behavior (e.g., tab switching)

FEASIBILITY AND VIABILITY

- Feasibility :

    -Uses simple and lightweight tech stack—fully browser-based.

    -Offline-first approach ensures accessibility even without internet.

    -Requires no backend or database; minimal deployment cost.

- Challenges and Risks:

    -Limited to browser capabilities (e.g., file size limits).

    -May need optimization for large PDF processing.

- Mitigation Strategies:

    -Optimize summarization logic for speed.

    -Progressive Web App (PWA) version planned for better performance.

    -Limit file size and provide instant feedback to the user.

Impact and Benefits

- Target Audience:

  -High school and college students.

  -Students with ADHD or time management challenges.

  -Learners managing handwritten notes or digital PDFs.

- Benefits:

  -Saves 50%+ time spent on planning and switching tools.

  -Boosts consistency in task completion and revision.

  -Reduces academic stress with auto-generated weekly journals.

  -Encourages habit-building and focus awareness.

- Future Enhancements:

  -Smart AI for task prioritization

  -Calendar sync with LMS and Google Calendar

  -Mood-based UI (dynamic themes)

  -Progressive Web App (PWA) version for enhanced offline use