1. Restatement of the Pain Point and Design Takeaways

Pain Point:

Users struggle to complete tasks when deadlines are vague (e.g., "today" or "this weekend"), leading to procrastination, distractions, and poor time estimation. The formative research highlights that time-boxed tasks with specific durations create urgency and boost completion rates. This project designs a minimal task-tracking web application with integrated timers to tackle these challenges effectively.

Design Takeaways from Formative Work:

The formative research combined a survey of 30 participants (aged 18-45) and a focus group of 5 PhD students, revealing key insights:

Procrastination (60% of survey respondents): Instant-start timers are essential to prompt immediate action, as focus group participants noted timers "create urgency."

Task Duration Estimation (45% struggle): Requiring users to set adjustable time limits will enhance planning skills.

Distractions (50% affected): A minimalist web app, favored by the focus group for fewer notifications, will minimize interruptions.

Motivation (40% lacking): Visual analytics summarizing completed tasks and productive time will boost motivation, a feature strongly supported by focus group feedback.

Integration: Tasks and timers should link with additional details (e.g., progress notes) for comprehensive tracking.

These takeaways shape a design that addresses user struggles through simplicity, urgency, and motivational feedback.

Design (Paper prototype)

Create a New Task

☐ My Tasks

+ADD NEW TASK

[Task Status]

☐ Search Tasks

Write Report

Time

◉ ☐   change status / start or stop
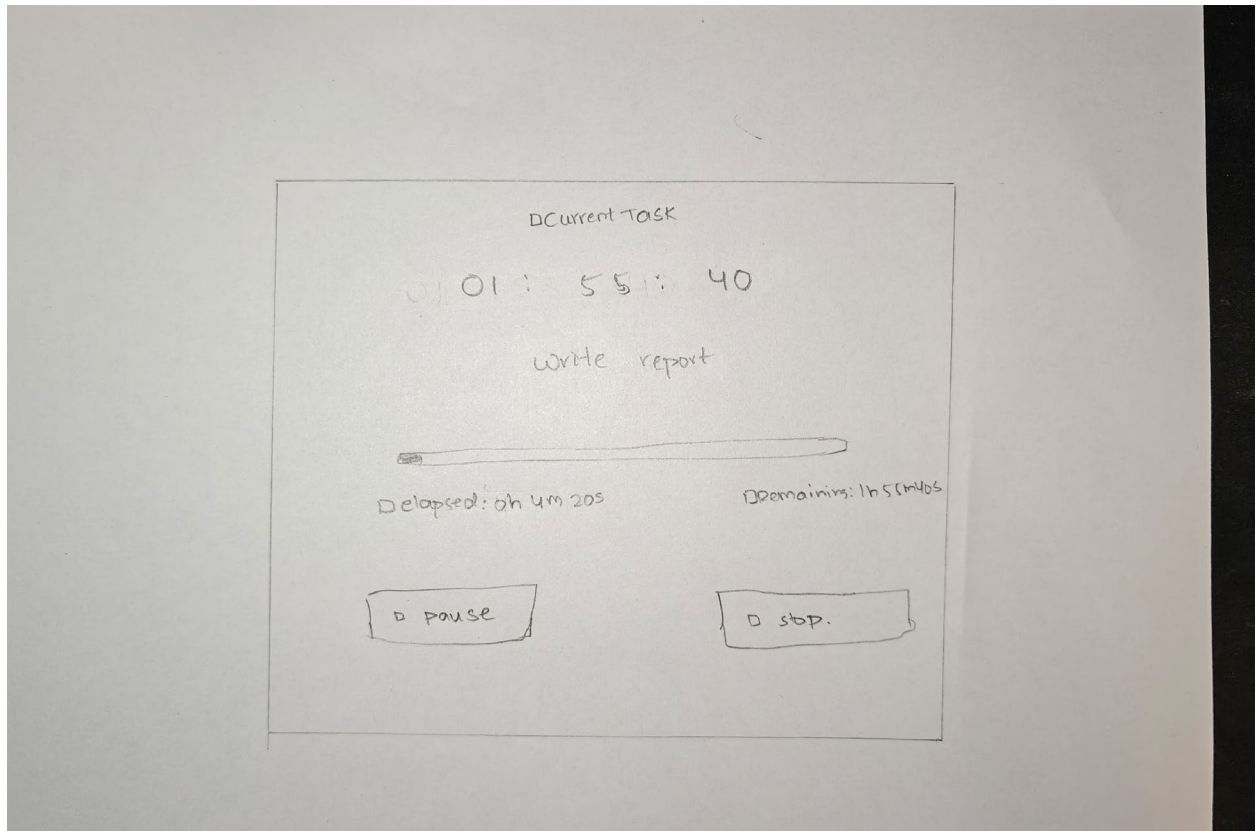
Prepare presentation

Time

◉ ☐

Client call

Time

◉ ☐

View and Manage Task List

Focus on Task with Timer

☐ Today's Productivity   Saturday, April 5, 2025

☐ Tasks completed
4

☐ Total Production Time
5h 15m

☐ Completion Rate
100 %

☐ Completed Tasks

  ☐ Write report   (2h 0m)
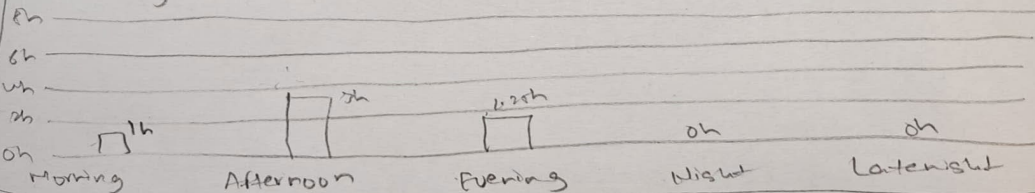
  ☐ Prepare Presentation   ☐ 1h 30m

  ☐ Client call   ☐ 0h 45m

  ☐ email follow-ups   ☐ 1h 0m

☐ Hourly Productivity

6h
5h
4h
3h   3h   2.25h
2h   1h
0h   Morning   Afternoon   Evening   0h   0h
                                            Night   Late night

Total productive time   ☐ 5h 15m

☐ Productive Insights
  ☐ Most productive time
  Afternoon completed 3h 15m
        Between

  ☐ longest task
  write report
  took 2 hours to complete

  ☐ Export summary   ☐ Plan tomorrow

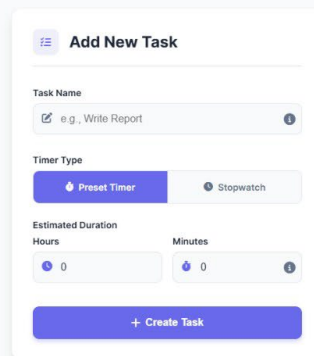**Review Daily Productivity**

Task 1: Create a New Task

User Goal: Create a new task and set its estimated duration.

Steps:

1. **Task Definition:** The user enters a task name and sets the estimated time via: Input task name in the text field (e.g., "Write Report"). Set duration using hours and minutes inputs (e.g., "2" and "0").
2. **Timer Options:** The user can choose between a preset timer with a defined duration, Stopwatch to track time without a predetermined limit
3. **Task Creation:** After filling in the details, the user clicks "Create Task" to add it to their task list.

Task Success: The task is successfully created and appears in the user's task list with the correct name and duration.


Task 2: View and Manage Task List

User Goal: View all created tasks and start working on a specific task.

Steps:

1. **Task Overview:** The user sees a list of all tasks with: Task names prominently displayed, Duration for each task (e.g., "Write Report - 2h 0m"), Start button for each task
2. **Task Filtering:** The user can filter tasks by: All tasks, In Progress tasks, Completed tasks
3. **Task Selection:** The user clicks the "Start" button next to a task to begin working on it.

Task Success: The user successfully views their task list, applies filters as needed, and starts working on a selected task.
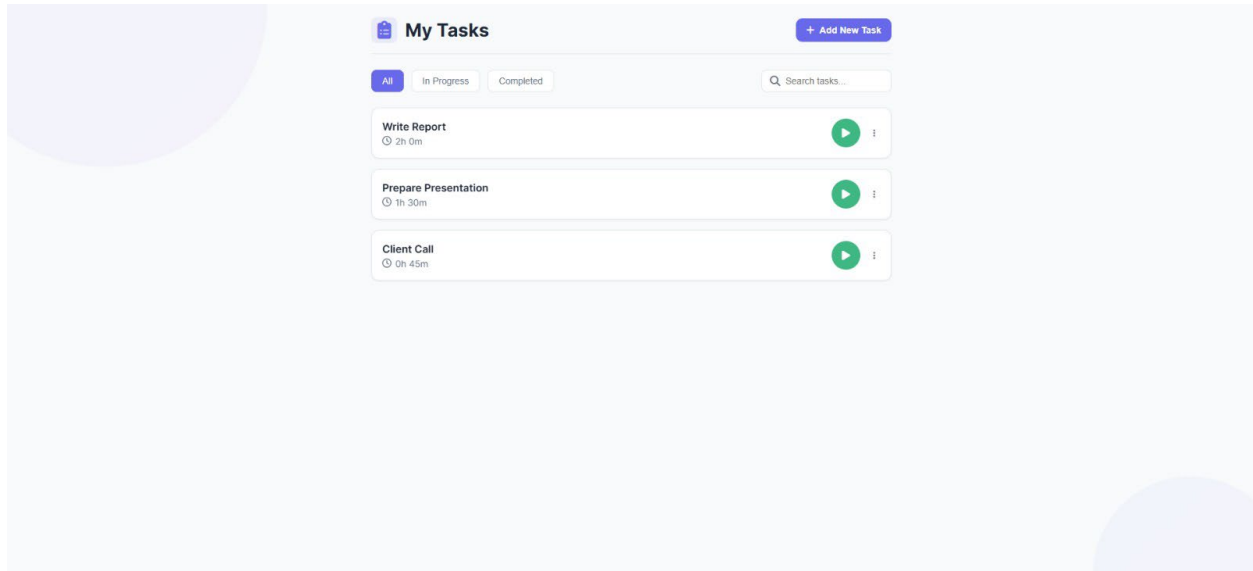

Task 3: Focus on Task with Timer

User Goal: Use the timer to focus on the current task and track time spent.

Steps:

1. **Timer Display:** The user sees a large countdown timer showing remaining time (e.g., "01:59:30"), Task name displayed prominently (e.g., "Write Report"), and a Progress bar showing elapsed time percentage
2. **Timer Controls:** The user can Pause the timer when taking a break, resume the timer when continuing work, stop the timer to end the task session
3. **Task Completion:** When the timer expires or the user stops it, the task is marked as completed.

Task Success: The user successfully uses the timer to focus on their task, manages breaks with pause/resume, and completes the task.
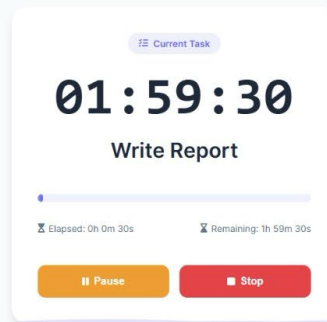
Task 4: Review Daily Productivity

User Goal: Review completed tasks and analyze time spent on productive activities.

Steps:

1. **Summary View:** The user sees: List of completed tasks with time spent (e.g., "Write Report - 2h 0m"), Total productive time calculation (e.g., "Total Productive Time: 5h 15m"), Visual representation of productivity (bar chart by time of day)
2. **Productivity Insights:** The system provides the most productive time period, the longest completed task, Task completion rate

Task Success: The user gains insights into their productivity patterns, understands how they spent their time, and can make informed decisions for future planning.
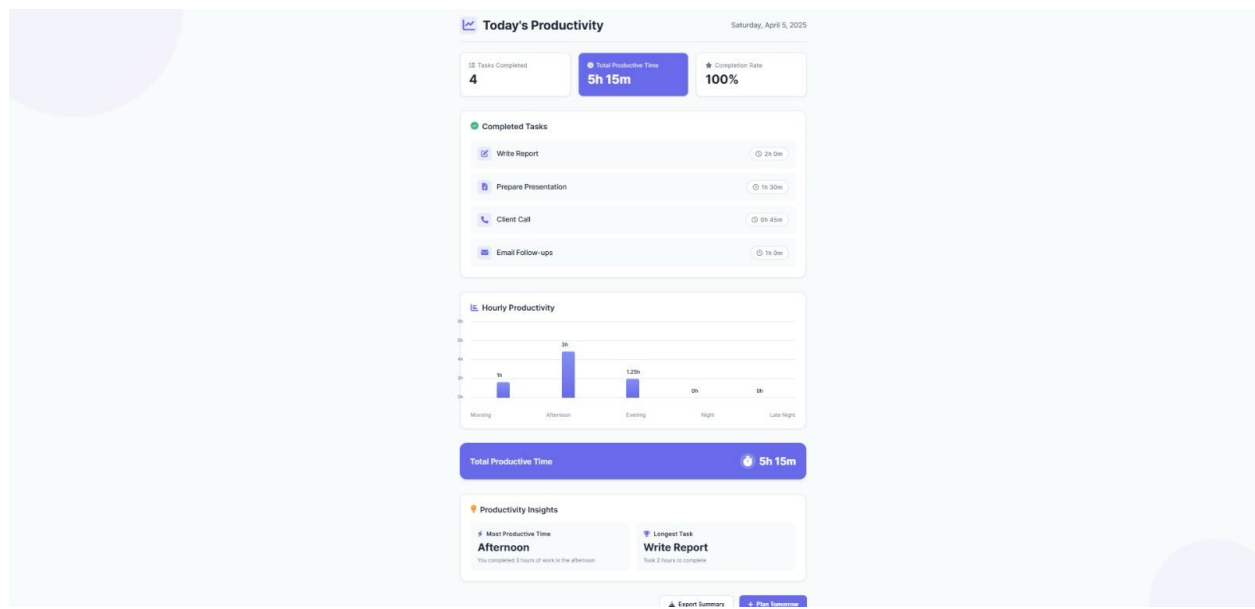
Task Creation Screen

This screen serves as the entry point for adding new tasks to the productivity tracker. The clean interface guides users through defining their tasks and setting time expectations.

Key Features:

- **Task Name Field**: Allows users to enter a descriptive task name
- **Timer Type Selection**: Users can choose between preset timer or stopwatch functionality
- **Duration Setting**: For preset timers, users can set hours and minutes
- **Stopwatch Option**: For tasks without a predetermined duration
- **Create Task Button**: Prominently placed to finalize task creation

Purpose: Enables users to quickly define tasks and set realistic time parameters for better planning.

The task creation screen offers two timer modalities to accommodate different work styles:

1. **Preset Timer**: For time-boxed activities with clear duration expectations
2. **Stopwatch**: For activities where timing is open-ended but tracking is still desired

When creating a task with a preset timer, users must specify at least some duration (hours or minutes must be greater than 0), ensuring all tasks have a meaningful time allocation.

Task List Screen

This screen provides an overview of all tasks and serves as the central hub for task management. The design emphasizes clarity and quick access to task details.

Key Features:

- **Task List**: Displays all tasks with their names and durations
- **Start Buttons**: Each task has a dedicated start button for immediate action
- **Filtering Options**: Users can filter between all, in-progress, and completed tasks
- **Search Functionality**: Allows users to quickly find specific tasks
- **Task Status Indicators**: Visual cues show which tasks are in progress or completed

Purpose: Gives users a comprehensive view of their tasks and provides quick access to start working on any task.

The task list is designed to be scannable, with clear visual hierarchies that help users quickly identify task status. The interactive filtering system helps users focus on relevant tasks depending on their current needs - whether planning upcoming work or reviewing completed items.

Each task card presents the essential information (name and duration) while the prominent "Start" button encourages immediate action, supporting the app's focus on productivity and task completion.

Timer Screen

This screen is the focal point during active work sessions. It provides a distraction-free environment with clear time tracking and simple controls.

Key Features:

- **Large Timer Display**: Shows remaining time in hours, minutes, and seconds
- **Task Identification**: Clearly displays which task is currently in progress
- **Progress Bar**: Visual indicator of elapsed vs. remaining time
- **Control Buttons**: Pause and Stop functions for managing the work session
- **Elapsed/Remaining Time**: Additional context on work progress

Purpose: Creates a focused environment for task completion with clear time awareness.

The timer screen is designed to minimize distractions while providing just enough information to help users stay on track. The large countdown timer creates a sense of gentle urgency, while the progress bar offers a visual reference for how much of the allotted time has passed.

When a user pauses the timer, a clear overlay indicates the paused state, ensuring users are always aware of the timer status. The stop button includes a confirmation dialog to prevent accidental session termination.

Upon task completion, a congratulatory message appears, providing positive reinforcement for the user's accomplishment.

Productivity Summary Screen

This screen provides analytics and insights on completed tasks and time usage. It serves as both a motivational tool and a source of actionable insights.

Key Features:

- **Completed Task List**: Shows all finished tasks with their actual durations
- **Total Productive Time**: Summarizes the day's productive hours
- **Productivity Bar Chart**: Visualizes productive hours throughout the day
- **Productivity Insights**: Highlights patterns like most productive time periods
- **Daily Completion Statistics**: Shows metrics like tasks completed and completion rate

Purpose: Motivates users by highlighting accomplishments and provides insights for future planning.

The summary screen transforms raw task completion data into meaningful insights. The bar chart visualization makes it easy to identify productive periods during the day, while the completed task list provides satisfaction through visible accomplishments.

The insights section helps users identify patterns in their productivity, such as recognizing that afternoons are their most productive time or that certain tasks consistently take longer than others. These insights encourage reflection and better future planning.

The prominent display of total productive time serves as a motivating benchmark, encouraging users to maintain or improve their productive hours over time.