Team 5 Project - Synergy Pro (Assignment 2)

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TL: DR

SynergyPro is a hybrid productivity platform that integrates task management with personalized study scheduling. It enhances team collaboration, individual learning, and real-time progress tracking for professionals and students.

Project Details

Name

What is the name of the project you want to develop?
SynergyPro - Task management & productivity platform

Description

What is the project you want to develop? (Description in less than **250 words)**
This platform addresses common productivity challenges by integrating task management with personalized study scheduling, offering a unified solution for both professionals and students. It effectively balances multiple responsibilities by allowing users to manage work and study commitments within a single system, reducing the stress of juggling various schedules and deadlines. The smart prioritization features organize tasks and study sessions based on urgency and importance, leading to improved productivity and focus.

Collaboration is enhanced through real-time communication and coordination tools, making it easier for teams and study groups to work together and share resources. Progress tracking is streamlined with real-time analytics and dynamic adjustment features, allowing users to monitor performance and make necessary changes to stay on track with their goals. By combining these elements, the platform ensures users can optimize their time, improve productivity, and achieve their objectives efficiently.

What is/are the problem/s you want to solve?
- Managing work and study schedules simultaneously.
- Poor task prioritization, leading to missed deadlines.
- Inefficient collaboration tools for remote teams.
- Difficulty tracking progress across multiple projects and study goals.

User Personas and Major Features

Who are the users you are targeting? [Identify a few user personas. Hint: There is usually more than one "type" of users.]

Use Case 1 - Individual Productivity

Persona 1: University Students

University students will use SynergyPro to balance their academic tasks, assignments, and extracurricular activities. They would like to rely on personalized schedules to optimize study time and manage group projects. The platform helps them stay organized and adjust their plans based on deadlines.

- **Pain Points**:
  - **Overwhelmed by Multiple Deadlines**: Struggling to keep track of various assignment due dates and exam schedules.
  - **Difficulty Prioritizing Tasks**: Finding it hard to determine which tasks are most important.
  - **Inconsistent Study Habits**: Struggling to maintain a consistent study routine.
  - **Poor Time Management**: Difficulty in allocating sufficient time for each task or subject.
- **Solutions**:
  - **Automated Schedule Generation**: Creates dynamic schedules that integrate deadlines and study time based on academic workload.
  - **Task Prioritization**: Provides tools for setting priorities to focus on the most important tasks.
  - **Progress Tracking**: Monitors progress and adjusts the schedule to keep students on track.
  - **Reminder Notifications**: Sends reminders for upcoming deadlines and study sessions to ensure timely completion.

Persona 2: Professionals

Professionals will use SynergyPro to manage work tasks, meetings, and personal development goals. It allows them to track progress, collaborate with team members, and maintain a productive routine while handling their daily workload.

- **Pain Points**:
    - **Managing Multiple Projects**: Difficulty in juggling several projects with overlapping deadlines.
    - **Lack of Visibility into Task Progress**: Uncertainty about the status and progress of tasks.
    - **Difficulty Maintaining Focus**: Struggling to stay focused due to frequent interruptions or shifting priorities.
    - **Inconsistent Workflow**: Issues with managing tasks and deadlines consistently.
- **Solutions**:
    - **Integrated Task Management**: Centralizes all project tasks and deadlines, providing a clear overview.
    - **Progress Tracking**: Offers visibility into task completion and overall project status.
    - **Distraction Management**: Helps maintain focus with features like time-blocking and productivity analytics.
    - **Dynamic Schedule Adjustments**: Adjusts schedules based on changing priorities and new tasks.

Persona 3: Remote Workers/Freelancers

Freelancers and remote workers will use SynergyPro to schedule work tasks, manage deadlines, and collaborate with clients. The platform keeps their workflow streamlined and helps them stay organized in flexible work environments.

- **Pain Points**:
    - **Difficulty Maintaining Routine**: Challenges in keeping a structured daily routine without a fixed workspace.
    - **Managing Client Expectations**: Struggling to keep track of multiple client requirements and deadlines.
    - **Isolation from Team**: Lack of tools to effectively collaborate with remote teams or clients.
    - **Fluctuating Workloads**: Difficulty in managing inconsistent workloads and project deadlines.
- **Solutions**:
    - **Flexible Scheduling**: Allows customization of schedules to fit varied work environments and routines.
    - **Client Management Tools**: Helps track client projects and deadlines, with features for client communication.

- ○ **Collaboration Features**: Integrates tools for seamless communication and collaboration with remote teams.
- ○ **Workload Optimization**: Dynamically adjusts tasks and priorities based on workload fluctuations.

Use Case 2 - Organizational/Group Productivity

Persona 1: University Students (Groups)

University student groups will use SynergyPro for project collaboration, dividing tasks and tracking progress for team projects. It ensures that everyone in the group is aligned and makes adjustments based on individual contributions.

- ● **Pain Points**:
  - ○ **Coordination Challenges**: Difficulty in coordinating tasks and deadlines among group members.
  - ○ **Lack of Accountability**: Uncertainty about individual contributions and task ownership.
  - ○ **Communication Issues**: Struggles with effective communication and collaboration within the group.
  - ○ **Tracking Progress**: Difficulty in tracking the progress of group projects and individual contributions.
- ● **Solutions**:
  - ○ **Collaborative Task Management**: Provides tools for assigning and tracking group tasks, with clear deadlines and responsibilities.
  - ○ **Accountability Tracking**: Monitors individual contributions and ensures accountability within the group.
  - ○ **Integrated Communication Tools**: Facilitates effective communication and coordination among group members.
  - ○ **Progress Visualization**: Offers visualizations of project progress and task completion to keep everyone aligned.

Persona 2: Working Professionals (Teams)

Teams of working professionals will use SynergyPro to collaborate on projects, assign tasks, and monitor deadlines. The platform enhances team communication and task tracking, ensuring everyone meets their goals.

- ● **Pain Points**:
  - ○ **Task Coordination**: Difficulty in coordinating tasks and deadlines across team members.
  - ○ **Lack of Real-Time Updates**: Challenges in keeping track of real-time progress and updates.
  - ○ **Project Overlaps**: Issues with managing overlapping projects and responsibilities.

- **Communication Breakdown**: Problems with maintaining effective communication within the team.
- **Solutions**:
  - **Team Task Assignment**: Allows for clear task assignments and deadline tracking for each team member.
  - **Real-Time Notifications**: Provides real-time updates and notifications on task status and project changes.
  - **Project Management Tools**: Helps manage multiple projects with features for tracking overlaps and dependencies.
  - **Enhanced Communication**: Offers integrated communication tools to facilitate team discussions and updates.

Persona 3: Professors

Professors will use SynergyPro to manage their research, academic tasks, and student progress. It allows them to balance teaching responsibilities with personal projects, offering an efficient way to organize their workload.

- **Pain Points**:
  - **Balancing Responsibilities**: Difficulty in balancing teaching, research, and administrative tasks.
  - **Tracking Student Progress**: Challenges in monitoring and managing student progress and assignments.
  - **Managing Research Projects**: Issues with organizing and tracking multiple research projects and deadlines.
  - **Time Allocation**: Difficulty in allocating time effectively across various duties.
- **Solutions**:
  - **Integrated Workload Management**: Helps balance teaching, research, and administrative tasks with integrated scheduling.
  - **Student Progress Monitoring**: Tracks student assignments, grades, and progress, offering insights into performance.
  - **Research Project Tracking**: Organizes research tasks and deadlines, with features for managing project milestones.
  - **Efficient Time Management**: Provides tools for effective time allocation and prioritization across responsibilities.

Persona 4: Human Resources

HR professionals will use SynergyPro to manage tasks related to employee onboarding, training, and internal communications. The platform provides tools to track tasks, plan meetings, and manage workflows.

- **Pain Points**:
  - **Onboarding Complexity**: Challenges in managing and tracking multiple onboarding processes for new hires.

- ○ **Training Coordination**: Difficulty in coordinating and tracking employee training and development programs.
  - ○ **Internal Communication**: Struggles with managing internal communications and updates effectively.
  - ○ **Workflow Management**: Issues with managing various HR workflows and task deadlines.
- ● **Solutions**:
  - ○ **Onboarding Management Tools**: Streamlines the onboarding process with task tracking and progress monitoring.
  - ○ **Training and Development Tracking**: Helps plan and track employee training programs and development activities.
  - ○ **Internal Communication Integration**: Provides tools for managing internal communications and updates efficiently.
  - ○ **Workflow Management Tools**: Helps organize and track HR workflows and deadlines effectively.

Who are the major features you are targeting? [Identify major functionality]

- ● **Task Management & Study Scheduling:** Allows users to create, assign, and track tasks alongside study sessions. This feature integrates personal study schedules into a professional task management tool.
- ● **AI-Powered Task & Study Prioritization:** The system dynamically prioritizes both professional tasks and study sessions based on deadlines, user availability, and performance. It makes smart recommendations for task delegation and study session lengths.
- ● **Collaboration & Resource Sharing:** Offers real-time collaboration features such as chat, file sharing, and schedule collaboration, ideal for both team projects and study groups. Users can share resources and work jointly on learning plans.
- ● **Progress Tracking & Analytics:** Provides detailed analytics for both work tasks and study sessions. Users can visualize study patterns, team productivity, and goal achievement with interactive dashboards.
- ● **Dynamic Schedule Adjustments:** Automatically adjust tasks and study schedules based on feedback, progress, or changing priorities. This feature ensures that users always have an up-to-date plan that fits their current needs.
- ● **Third-Party Integrations:** Seamlessly integrates with tools like Google Calendar for syncing schedules, Slack for team communication, GitHub for project tracking, and Twilio for sending study reminders and notifications.

MVP (Minimum Viable Product)

Which features are a must to have? (If you don't have these you do not have a project, not really)

- **Task creation and assignment -** Users will be able to create a task and assign the task.
- **Categorization of tasks -** Users could add a tag to each task, which allows them to categorize the tasks easily. (Ex: Students creating tasks could have tags like "Assignment", "Project" and would be able to filter the tasks based on tags).
- **AI-generated personalized schedules based on deadlines** - Application would use AI to prioritize tasks and assist users in scheduling based on deadlines.
- **Real-time collaboration tools with basic chat and file sharing** - Users in group tasks would be able to communicate in real-time based on built-in chat functionality and also would be able to share files.
- **Advanced features for task creation** - Allow users to create recurring tasks, provide the ability to upload files to a task.
- **Google Calendar integration for syncing schedules** - Ability to sync google calendar with tasks, so that the users' schedules are always up-to-date.
- B**asic progress tracking with visual charts** - Users could track their progress through charts, giving them a clear view of their progress.

MLP (Minimum Lovable Product)

Which features are really nice to have so the users would fall in love with the product?

- **AI and Generative AI -Powered Dynamic Study and Task Recommendations -** Leverage AI and Generative AI to analyze user habits, suggesting optimal task durations, breaks, and personalized study plans. It adapts over time, providing tailored recommendations to enhance productivity and learning efficiency.
- **Slack Integrations for Improved Team-Based Productivity -** Integrate with Slack to streamline team communication, enabling task updates, reminders, and resource sharing directly within Slack channels, enhancing workflow and reducing context-switching.
- **GitHub Integration -** Synchronize tasks with GitHub repositories, auto-generating tasks from issues and tracking development progress. This ensures coding efforts align with overall project goals.
- **Twilio-Powered Reminders for Study and Task Deadlines -** Use Twilio to send customized reminders via SMS, voice, or email for deadlines and study sessions, offering follow-up options to keep users on track and consistent with their schedules.

Nice-To-Have Features

- **AI chatbots for personalized study or productivity advice**: Allow users to get suggestions about how to study and improve productivity by chatting with AI chatbots.
- **Course and resource recommendations integrated with study plans**: Automatically provide some courses and resources that may be helpful for users, integrating study plans when providing resources.
- **Advanced performance tracking over time with adaptive learning paths**: Application continuously monitors a student's progress, analyzing their strengths and weaknesses over time and giving adaptive learning paths accordingly.
- **Custom task prioritization filters based on personal preferences:** Allow users to organize and prioritize tasks based on users personal preferences, such as normal things and urgency.
- **AI to help refine work and divide it into some subtasks:** Application can help users to break down the main work into smaller ones, making it easier to complete.

Call-Out CRUD Features

Create:
- **Tasks**: Users can add new tasks to their to-do lists, specifying details like deadlines and priorities.
- **Schedules**: Users can set up new schedules for work or study sessions, including start and end times.
- **Groups**: Users can form new collaboration groups or study groups to facilitate teamwork and resource sharing.

Read:
- **Task Status**: Users can view the current status and details of their tasks, such as whether they are in progress, completed, or pending.
- **Team Productivity**: Users can track overall productivity metrics and performance indicators of their team or study group.
- **Study Progress**: Users can review their progress on study goals and milestones, checking completed sessions and remaining tasks.

Update:
- **Deadlines**: Users can change the deadlines for tasks or study sessions to accommodate shifting priorities or extended timelines.
- **Schedules**: Users can adjust existing schedules to reflect changes in availability or new commitments.
- **Tasks**: Users can modify task details, including descriptions, priorities, and assigned team members.

Delete:
- **Tasks**: Users can remove tasks that are no longer needed or have been completed.

- **Study Sessions**: Users can delete past study sessions that are no longer relevant or have been completed.
- **Projects**: Users can eliminate outdated or completed projects to keep their workspace clutter-free.

Similar Already Existing Platforms

What similar applications exist on the market? (at least 3 with links and descriptions).
[If this work is truly unique and no one has ever done anything even remotely similar please explain your search procedure and how you came to this conclusion]

1. Trello - Task management system for teams and individuals. Focuses on project tracking but lacks advanced study scheduling or AI prioritization.
2. Todoist - Personal productivity tool that helps individuals keep track of tasks. Offers basic scheduling but doesn't integrate study recommendations or team collaboration features.
3. Notion - A tool for both personal and professional project management. It allows knowledge sharing but lacks AI-powered scheduling and study suggestions.