Part 1: Data Analysis & Insight Generation (50 Points)

Summary of Findings & Identified User Problem

My analysis of the FlowState user log data has revealed several key insights into user behavior. The most frequent action is the creation of subtasks, which suggests that users are actively breaking down larger tasks. A particularly strong pattern emerged in the actions immediately following the creation of a task. In most cases, users immediately create a series of subtasks, indicating a common workflow of defining a high-level objective and then breaking it down into smaller steps. This repetitive, manual creation of subtasks presents a clear opportunity for improvement.

Furthermore, the behavior of user user_108, who rapidly cycles through different project views in a very short session, highlights a potential usability issue. This "view-churn" suggests that the user may be struggling to find a view that presents the project information in a way that meets their immediate needs, leading to inefficient interaction with the application.

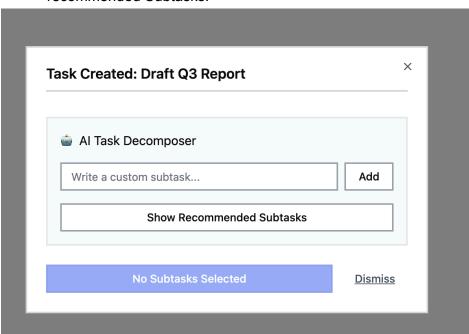
Based on this analysis, the key user problem I have identified is that **the process of breaking down large tasks into smaller subtasks is manual, repetitive, and time-consuming for FlowState users.** This is the problem my proposed AI feature will aim to solve.

Part 2: Al Feature Mockup & Justification (50 Points)

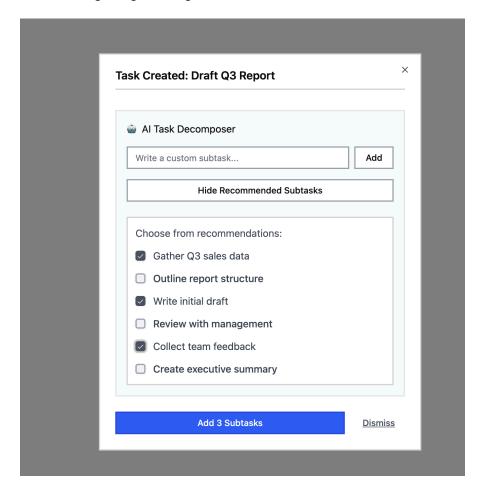
Al Feature: "Al Task Decomposer"

The **Al Task Decomposer** is an intelligent feature designed to streamline the project planning process within FlowState. When a user creates a new, high-level task, the Al analyzes the task title (e.g., "Launch new marketing campaign," "Develop Q4 sales report") and recommends the list of relevant, actionable subtasks. This feature directly solves the user problem identified in the data analysis: the manual, repetitive, and time-consuming process of breaking down large tasks into smaller ones. By augmenting this step, the Al Task Decomposer saves users time, reduces manual data entry, and helps them build more comprehensive task plans with less effort.

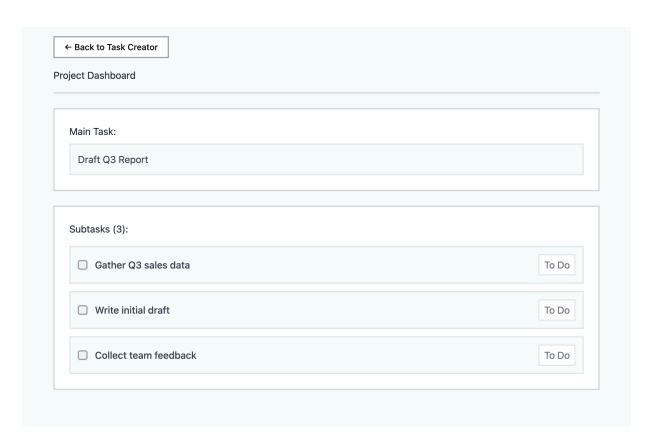
1. Based On the Main task, User can write the custom task on their own or get Al recommended Subtasks.



2. After getting the Al generated recommendations, user can choose which one to add.



3. After adding the subtasks, user can see the main task and subtasks at the dashboard.



Design Justification

Each design element of the "AI Task Decomposer" is a direct response to the user behavior patterns discovered in our data analysis.

Our analysis revealed a crucial user workflow: the most frequent action immediately following a create_task event was create_subtask. This indicates a repetitive, manual process that is ideal for automation. The "AI Task Decomposer" directly targets this inefficiency by generating relevant subtask suggestions, saving users time and effort.

Justifying the Optional Trigger

The decision to make AI recommendations optional, triggered only by clicking the "Show Recommended Subtasks" button, comes directly from the data. While the create_task -> create_subtask sequence was the dominant pattern, it was not universal. Forcing suggestions after every single task creation would disrupt simpler workflows (e.g., a task like "Call John Doe"). This design supports the primary workflow we identified without obstructing users who do not fit that pattern, ensuring the feature remains helpful and not a hindrance.