# Performing Usability Testing

on gamified version of Google Calendar

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## **Project brief**

Conduct usability testing on a previously completed project (physical or digital) to evaluate how well it meets user needs and identify areas for improvement.





01

# INTRODUCTION

### **Overview**

### What is Google Calendar?

Google Calendar is a widely used application for scheduling events, setting reminders, and managing tasks. It's known for its simple, user-friendly interface and ease of use.

### Objective

The aim is to enhance user engagement and productivity in Google Calendar by integrating gamification elements. The focus is on creating a more interactive experience, encouraging users to use the app regularly and efficiently.



## Primary research insights

- Google Calendar is mainly used for important events, not daily tasks.
- Users find it easy to set dates/times but often skip event details due to time constraints.
- Users struggle to stay engaged with reminders and often lack motivation to act on them.
- Users are motivated by rewards, streaks, and points for task completion.
- Immediate feedback (e.g., points or badges) would encourage more engagement with event details and reminders.



# **Target Audience**

### Demographics:



18-45 years old



Students, working professionals, freelancers, event planners.



Medium to High

### Key Characteristics:

- Users who rely on scheduling to manage their time and tasks.
- Busy individuals who need reminders to stay organized.
- Gamification lovers who enjoy rewards for completing tasks.

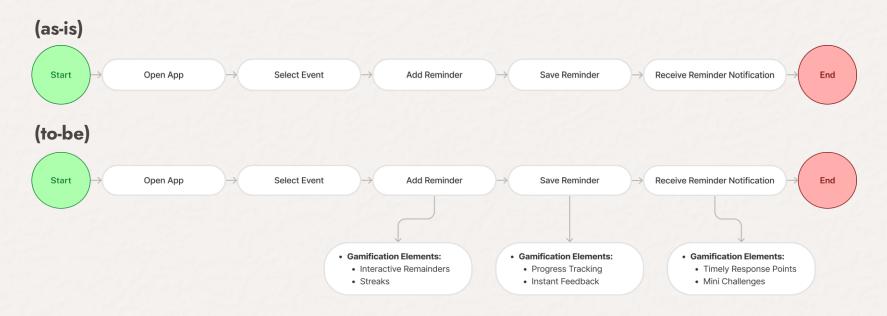
### User Goals:

- Efficiently manage time.
- Stay on top of tasks and events.
- Be rewarded for consistent usage.

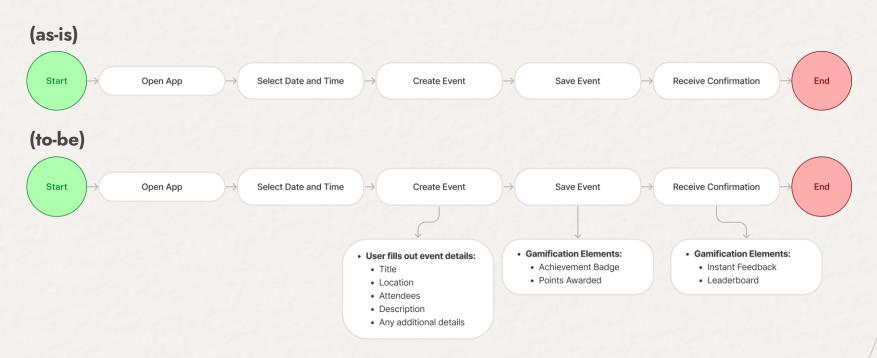
#### · Pain Points

- Not fully utilizing Google Calendar's features due to time constraints.
- Forgetting tasks or events due to lack of reminders and motivation.

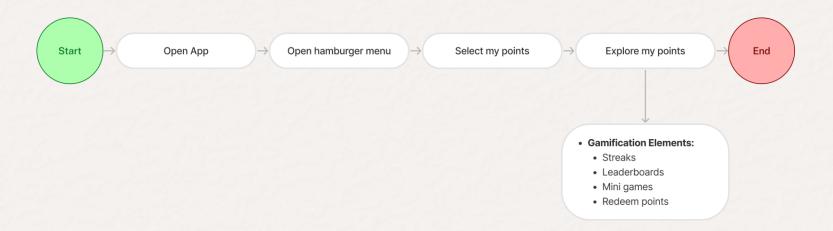
### Task flow (user setting a reminder)



### Task flow (user scheduling events)



### Task flow (user going to my points)



### Summary

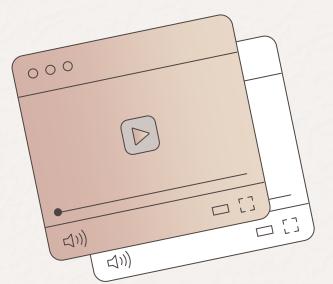
This project focuses on enhancing user engagement in Google Calendar through the integration of gamification elements. It began with primary research, including interviews, to gather valuable user insights, which informed the creation of personas, empathy maps, and customer journey maps. Based on these findings, key pain points and opportunities were identified, leading to the development of a refined problem statement centered on gamification. Following this, a conceptual "To Be" task flow was designed, incorporating gamification features such as points, streaks, badges, leaderboards, rewards, mini-games, and more.

## Scan for prototype



https://bit.ly/figma-prototype-google-calendar





# 02

# **Usability Testing**

# Stage 1 Planning

- Define the Project & Purpose of Study.
- Identify Desired Users.
- · List Materials Needed



# Define the Project & Purpose of Study

- Project: The project focuses on redesigning Google Calendar to integrate gamification elements, aiming to improve user engagement and overall productivity.
- Purpose of Study: The study aims to assess how gamification, such as points systems, badges, and interactive reminders, affects user experience and efficiency in using Google Calendar for scheduling events and setting reminders.



## **Identify Desired Users**

 Target audience: Professionals, Students & Regular users of digital calendars.

### Key Attributes:

- Ages: 18-45 years
- Tech-savvy individuals who use digital tools daily.
- Busy individuals who need reminders to stay on track.



### **List of Materials Needed**

- 1. Smartphones, Laptops, Tablets
- 2. Google Calendar Application
- 3. Screen Recording Software
- 4. Timer
- 5. Pre-Test Questionnaire
- 6. Qualitative and Quantitative Questionnaires
- 7. Post-Test Feedback Form
- 8. Video/Audio Recorder
- 9. Test Instructions Sheet



# Stage 2 Recruit participants

- Identify user profile
- Competency level of each participants
- Identify Costs Involved in Recruiting Participants



### Identify user profile

### **Students**



Devyansh Sharma



Ayush Gilhare



Ankit Singh



Aditya Yadav

Working professionals & Freelancers



Rakesh Jha



Tokeshwar Sahu



Abhishek Yadav



Pranav Sahu

- Competency level of all participants **Intermediate**
- **No costs** involved in recruiting participants.

# Stage 3 Writing task

Choose Activities



## **Usability Testing Tasks**

### Directed task (Specific / Answer oriented)

Task 1: Scheduling an Event.

Task 2: Setting a Reminder.

### First-Impression Task (Based on look of the product)

Task 3: Responding to a Reminder Prompt.

### Explorative Tasks (Open ended / Research oriented)

Task 4: Exploring "My points".



# Stage 4 Facilitation & Collect Data

- Quantitative questions
- Qualitative questions
- Feedback form
- · Participants performing testing



### **Questionaries**

#### Quantitative

The questions assess task completion, time taken, errors, need for assistance, ease of use, recall of steps, and emotional response while using the gamified interface, aiming to evaluate user experience, efficiency, and engagement with the system.

### Qualitative

The questions focus on identifying **challenges** faced while scheduling events using the **gamified interface**, preferences for **design elements**, and any **confusion** during the scheduling or reminder process. They also explore if users needed **help** with new features and ask for **feedback** to improve the **gamified reminders** and scheduling features.

### Feedback form

Questions	Poor	Average	Good	Excellent
How was your overall experience?				
Are you satisfied with the software?				
Were the tasks easy to understand?				
Were the tasks easy to perform?				
How do you rate the design of the software (Visually)?				
How easy is the software to use?				
How easily do you comprehend the icons?				
How easily do you comprehend the layout?				
Did the software provide enough assistance?				
How easily do you memorize the functions?				
How many problems did you face while using the software?				
Do you have any suggestions for improvement or general comments?				

https://bit.ly/feedback-form-google-calendar

### Data (Raw format)



# Participants performing testing



# Stage 5 Analysis

- Analysis (Quantitative data)
- Insights (Qualitative data)
- Feedback form (Analysis)



### Analysis (Quantitative data)

- The time taken for tasks ranged from **0.10 to 0.60 minutes**, showing efficient performance.
- The average completion ratings for all tasks are consistently high, ranging from 0.92 to 0.93.
- **No errors** were recorded for any of the tasks, indicating smooth and error-free user interactions across all tasks.
- The average system recall for all tasks was 0.81.
- **No assistance** was required for any of the tasks, indicating that users were able to independently complete all tasks without help.
- The average level of difficulty for all tasks was **0.98**, indicating that tasks were generally considered **easy** by users.
- The average emotional response for all tasks was **0.61**, indicating that most users felt **comfortable** while using the app, with occasional moments of **excitement**.

### Insights (Qualitative data)

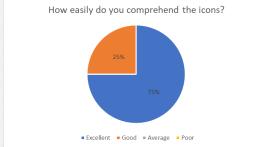
- Scheduling an event was quick, easy, and efficient with a simple design.
- Setting reminders was **fast**, **easy**, and **flexible** with a customizable layout.
- Responding to reminder prompts was straightforward with instant feedback.
- The "My Points" feature was fun and motivating with real-time updates and rewards.
- The app is **very easy to use**, and users did not feel the need to suggest any changes.
- Across all tasks, users showed a strong preference for the minimalist and clear design of the app.
- Across all tasks, no errors were reported by users.
- For all tasks, **no assistance** was needed from the users. This indicates that the app is **easy to** use and self-explanatory.
- Some recommendations -
  - Enable or disable gamification elements.
  - Customize badges, themes, or leaderboard.
  - o Collaborative challenges or team-based leaderboards.

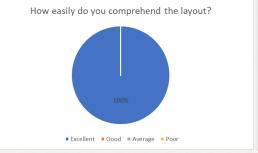
### Feedback form (Analysis)

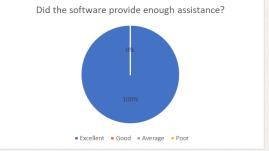












### Recommendations for improvement

- Provide an option for users to enable or disable gamification elements, catering to both productivity-focused and engagement-driven users.
- Allow users to customize badges, themes, or leaderboard visibility to align with their preferences.
- Introduce collaborative challenges or team-based leaderboards for organizations.

# Thank you