



Mobile Apps 4: Plan and Ship Your App

Problem, users, MVP, testing and the app store listing

NAME _____

DATE _____

CLASS _____

From Idea to Plan

Good apps start with a problem, not a feature list. A **problem statement** names who has the problem, what the problem is, and why it matters, without describing the solution. The **target user** is the specific group the app is for (for example, "ninth graders who ride the bus," not "everyone").

Teams write features as **user stories**, short sentences told from the user's point of view: *As a* [type of user], *I want* [a goal] *so that* [a reason]. A good story names a real user, describes what they want to do (not how the code works), and gives a reason.

The first version should be an **MVP** (minimum viable product): the smallest app that solves the core problem well enough for real users to try. To decide what goes in, teams use **MoSCoW prioritization**:

Must have

Without it, the app does not solve the problem. The MVP is the Musts.

Should have

Important, but the app still works without it. Next in line.

Could have

Nice extras, added only if there is time.

Won't have (this time)

Agreed to leave out of this version, to protect the schedule.

1 Which Problem Statement Is Stronger?

Two teams describe their app ideas.

Team A: "We want to make a cool app with chat, maps and AI."

Team B: "Students in after-school clubs often miss meeting changes because updates are spread across emails and posters, so they show up to empty rooms."

a. Which statement is stronger? Explain using the three parts of a problem statement.

b. Name a specific target user for Team B's app.

c. Rewrite Team A's idea as a real problem statement (invent the who, problem and why).



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2 Fix the User Stories

Each story below breaks a rule from the reading. Rewrite it in the full *As a ... I want ... so that ...* format.

a. "The app has a database table for club meetings."

b. "As a user, I want notifications."

3 Prioritize with MoSCoW

Team B is building **ClubConnect**, an app that tells students about club meeting changes. They have six weeks. Label each feature **M**, **S**, **C** or **W**.

Feature	Label
a. See the next meeting time and room for my clubs	
b. Get a notification when a meeting changes	
c. Choose which clubs I belong to	
d. Custom color themes for the app	
e. Video chat inside the app	
f. Add a meeting to my phone's calendar	

g. Which feature did you mark **W**? Why is leaving it out a good decision for a six-week MVP?

h. In one sentence, describe ClubConnect's MVP.

Testing and Shipping

Before release, test more than the "happy path" where everything goes right. Check different **device sizes** (small phones, large phones, tablets), **accessibility** (larger text settings, a screen reader, color contrast), **offline** behavior (airplane mode), and **edge cases**: unusual input such as an empty list, a very long name, or a tap on the same button twice. A **test case** says what to do and the **expected result**. A **beta test** lets a small group of real users try the app before the public release and report problems.

To publish, developers create an **app store listing**: the app's name, a short description, screenshots, and **privacy disclosures**. Both Apple's App Store and Google Play require developers to state what data the app collects and how it is used, and that information must be accurate.



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4 Write a Test Plan

Write one test case for ClubConnect in each category. The first row is an example.

Category	What to do	Expected result
Example: offline	Turn on airplane mode, then open the app	Shows saved meetings with an "Offline" note

a. Device size. Do: _____

Expected: _____

b. Accessibility. Do: _____

Expected: _____

c. Edge case. Do: _____

Expected: _____

5 Beta Feedback and the Store Listing

Twenty students beta tested ClubConnect for a week. Here is what they reported, and the team's draft store listing.

BETA FEEDBACK

12 of 20: "The app crashes when I belong to zero clubs."

7 of 20: "I want a dark mode."

5 of 20: "Text is hard to read with large text turned on."

2 of 20: "Add club photos."

DRAFT STORE LISTING

Name: ClubConnect

Short description: The best app ever!!!

Screenshots: the app logo only

Data collected: None (but the app stores each student's name, email and club list on a server)

a. Which problem should the team fix first? Explain using the data and the term **edge case**.

b. Rewrite the short description so it tells a student what the app does.

c. What is wrong with the "Data collected" line, and why does it matter to users and to the app stores?



**Mobile Apps 4: Plan and Ship Your App** (page 4)**6 Capstone: Plan Your Own App**

Plan an app that solves a real problem for people you know. Use the terms from this sheet.

a. Problem statement (who, what problem, why it matters):

b. Target user:

c. Three user stories (As a ... I want ... so that ...):

d. MVP: list your Must-have features.

e. One Won't have (this time) feature:

f. Data and permissions the app needs, and why:

g. Two test cases you will run before your beta test:

h. Wireframe your main screen.