

Topic 1.1: Collaboration

LO: CRD-1.A, CRD-1.B, CRD-1.C | Skill: 1.C, 6.A | Scenario: 1A: The TideTrack App Team

Scoring guide

Award the listed points for each subquestion when the response makes the key point in the model. Accept any reasonable wording. Part A(ii) is worth 2 points: 1 for naming and describing both roles, 1 for connecting pair programming back to the single-point-of-failure risk in Source 1.

Mini-FRQ — The Studybuddy Team *(Teacher Key)*

Short constructed-response. Total: 5 points. Read both sources, then answer every part in complete sentences.

A four-student team is building Studybuddy, an app that matches classmates into study groups. Two sources describe how the team is working. Use both sources to answer Parts A and B.

Source 1 — A message in the team's group chat

Group chat excerpt

Jordan: I just pushed all the matching code last night, finished it solo around 2am. It works on my laptop so we should be good.
Sam: Nice! Honestly I have no idea how the matching part works though.
Riley: Same. If something breaks the day of the showcase, only Jordan can fix it.
Avery: Can we go through it together this week so we all understand it? Maybe pair up at one computer?

Source 2 — A note from the team's planning board

Planning note

TEAM PLANNING NOTE

- We only tested Studybuddy on our own four phones (all new models).
- We have not asked anyone outside the team to try it.
- Open question: how do we decide between Jordan's matching idea and Avery's, since both partners feel strongly?

Part A

Consider how the team is dividing the work in Source 1.

(i) Identify one specific risk created by having Jordan write all of the matching code alone. (1 pt)

Model Response: Only Jordan understands the matching code, so if Jordan is absent or that code breaks during the showcase, no other teammate can fix it and the whole project stalls. The work has a single point of failure.

(ii) Explain how pair programming would address that risk. Name both roles and describe what each person does. (2 pt)

Model Response: In pair programming two teammates share one computer. The driver types the code while the navigator reviews each line, watches for mistakes, and keeps the overall plan in mind, and the partners swap roles regularly. If Jordan navigates while Sam or Riley drives, the matching code gets reviewed for bugs as it is written and more than one person ends up understanding how it works, removing the single-point-of-failure risk from Source 1.

Part B

Consider how the team is testing and deciding in Source 2.

(i) Describe one weakness in how the team has tested the app so far, and the kind of user that weakness could hurt. (1 pt)

Model Response: The team only tested on their own four new phones, so they share one narrow perspective and may have missed problems for users on older or budget phones, users with slower internet, or users with different accessibility needs. Testing only on similar devices lets bias slip into the product.

(ii) Determine one interpersonal skill the team should use to settle the open question about whose matching idea to use, and give a concrete example of using it here. (1 pt)

Model Response: The team should use consensus building or negotiation. For example, Jordan and Avery could each explain the benefit of their matching idea, agree to try Avery's idea for the simpler cases and Jordan's for the harder cases, and confirm that everyone can support that combined plan before moving on.