

Q1.

Maha-Kumbh Mobile App Development

A development team of 10-15 members is responsible for delivering a mobile app for the Maha-Kumbh festival in 3 months. The team includes: Lead, Scrum Master, Developers (Frontend & Backend), QA Testers and UI/UX Designers

Step-by-Step Planning :

1. User Story Selection: As a pilgrim, user wants to register on the app using his phone number so that she/he can receive personalized notifications.

2. Discussion: The team discusses aspects such as UI design, backend APIs, database integration, and SMS service. Developers express concerns about third-party SMS integration complexity. QA highlights test cases for multiple user scenarios.

3. Card Selection & Revealing:

- Each member picks a card representing their estimate:
- Developer A: 5
- Developer B: 8
- UI/UX Designer: 3
- QA Tester: 5
- Backend Dev: 8
- The estimates range between 3 and 8.

4. Discussion & Re-Voting:

- The UI/UX Designer explains that creating a simple registration page is easy, leading to their estimate of 3.
- The Backend Developer justifies 8 due to API security concerns.
- After discussion, the team votes again and agrees on 5 story points.

5. Final Estimation & Backlog Update:

- The story is assigned 5 story points.
- The process continues for other stories.

Q2.

Measuring Software Development Waste in Open-Source Software Projects using PRR:

PRR=rejected PRs over total merged PRs.

Open source link: <https://github.com/facebook/react-native>

$PRR = 28 / 20886 = 0.00134$

PRR in percentage = 0.13%

This indicates good management of the repository that is taken.