

DevOps Assignment

Q1: Read about “Planning Poker” - Agile estimation technique and illustrate an example with a Development Team of 10 who are tasked to develop a mobile app for Maha-Khumb in 3 months.

Answer:

Planning Poker – Agile Estimation for Maha-Khumb Mobile App Development

Project Overview

Objective: Develop a mobile app for Maha-Khumb in 3 months

Team Size: 10 members (Product Owner, Scrum Master, 8 Developers)

Key Features:

- User Registration
- Event Schedule
- Crowd Density Alerts
- Interactive Map
- Emergency SOS Button

Step 1: Setting Up the Estimation Session

- Facilitator: The Scrum Master leads the session.
- Estimators: 8 Developers + Product Owner participate.
- Cards: Each developer holds Planning Poker cards (1, 2, 3, 5, 8, 13, 20, 40, 100).
- Baseline Selection: The team agrees that a simple user registration feature should be estimated as 2 points for reference.

Step 2: Discussing User Stories & Estimating

User Story 1: User Registration

"As a user, I want to register using my phone number or email so that I can access event details."

- Discussion: Developers clarify requirements (OTP verification? Social logins?)
- Estimation Round 1: Votes: **3, 5, 5, 5, 8, 5, 5, 5**
- Outlier Discussion: A developer who voted 8 explains concerns about security issues.
- Re-estimation: After discussion, all agree on 5 story points.

User Story 2: Event Schedule

"As a user, I want to see the event schedule with real-time updates."

- Discussion: Needs admin panel updates, push notifications.
- Estimation Round 1: Votes: **5, 8, 8, 5, 8, 5, 5, 5**
- Outlier Discussion: The developers who voted 8 explain concerns about real-time updates.
- Re-estimation: The team agrees on 6 story points (average).

User Story 3: Crowd Density Alerts

"As a user, I want to receive alerts when a location is overcrowded to avoid congestion."

- Discussion: Needs GPS tracking, live heatmaps.
- Estimation Round 1: Votes: **13, 20, 13, 20, 20, 13, 13, 13**
- Outlier Discussion: Developers voting 20 highlight integration complexity.
- Decision: Team agrees on 15 story points after adjusting scope.

User Story 4: Interactive Map

"As a user, I want a real-time map to navigate Maha-Khumb."

- Discussion: Needs live tracking, event locations, crowd zones.
- Estimation Round 1: Votes: **20, 40, 20, 40, 20, 40, 20, 40**
- Outlier Discussion: Those voting 40 raise concerns about real-time GPS accuracy.
- Decision: Since it is a critical feature, they settle on 30 story points.

User Story 5: Emergency SOS Button

"As a user, I want a quick SOS button to call for help."

- Discussion: Needs GPS location sharing, emergency contacts.
- Estimation Round 1: Votes: 5, 5, 3, 5, 5, 3, 3, 5
- Consensus: 4 story points.

Step 3: Handling Discrepancies in Estimates

- Example: If one developer consistently gives very high estimates, the team discusses if they need more clarity or research.
- Action: If needed, a feature is put on hold for further exploration (e.g., Crowd Alerts need more research).

Step 4: Finalizing the Sprint Plan

Total Effort Estimated: 60+ Story Points

Sprint Distribution:

- Sprint 1: User Registration, Event Schedule, SOS Button (~15 points)
- Sprint 2: Crowd Density Alerts (~15 points)
- Sprint 3: Interactive Map (~30 points)

Key Takeaways from Planning Poker for Maha-Khumb App

Encourages team discussion before committing to estimates.

Outliers help identify risks early.

Provides realistic effort estimation for better sprint planning.

Ensures consensus so all developers understand the workload.