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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.

Ans. A development team of ten is tasked to develop a mobile app for the Maha-Khumb festival in 3 months.

Steps:

1. **User Story Breakdown:**
   - The Product Owner has broken down the app's features into user stories.
   - "As a pilgrim, I want to see a map of the festival grounds with key locations marked."
   - "As a pilgrim, I want to be able to find the locations of drinking water and restrooms."
   - "As a user, I want to see live traffic and crowd density information."
2. **Planning Poker Sessions:**
   a) *Present the user story*
      - The Scrum Master presents the user story and provides any additional context about the event schedule feature. The feature includes displaying a calendar with times, dates, and descriptions of key events.
   b) *Discussion:*
      - Team members ask clarifying questions, such as:
      - Does the schedule need to support multiple languages?
      - Will there be integration with external event scheduling systems?
      - How dynamic will the schedule be

   Based on these clarifications, the team understands that this feature requires:

   - Calendar integration.
   - Real-time updates if the schedule changes.
   - Multi-language support.
   - A simple user interface with easy navigation.

c) *Private Estimation:*
   Each team member thinks about the effort required and selects a card from their Planning Poker deck. They might choose:
   - **1** (Very simple)
   - **3** (Simple)
   - **5** (Moderate complexity)
   - **8** (Complex)

d) *Reveal:*
   The team reveals their selected cards. The results might be:
   - 2 members choose **3**.
   - 4 members choose **5**.
   - 3 members choose **8**.
   - 1 member chooses **13**

e) *Discuss Discrepancies:*
   The team discusses the wide range of estimates. The members who selected the higher numbers (8 and 13) explain their concerns:
   - The feature requires handling real-time data synchronization, which they anticipate will add complexity.
   - There's a need for robust error handling if the event schedule is delayed or unavailable.

   The team members who chose **3** and **5** explain that they feel confident about using existing calendar libraries, and the feature doesn't seem too complicated.

f) *Final Estimation:*
   After discussion, the team agrees to a final estimate of **8**. The reasoning is that even though some parts seem straightforward, the real-time integration and multi-language support make the task moderately complex.

3. **Result of the Estimation:**

   The team agrees that the "Schedule of Events" user story will require **8 effort points**.

4. **Planning the Sprint:**
   - Given that the team has 10 members and is working on a mobile app for Maha-Kumbh in 3 months, they now estimate how many user stories they can tackle in each sprint (typically 2 weeks).
   - For example, if they estimate each sprint can handle 50 effort points, they can plan for approximately 6 user stories per sprint.

Q2: Read Paper – Measuring Software Development Waste in OSS Projects -
https://arxiv.org/pdf/2409.19107. Pick one measure from this paper and apply it on
any open-source repository. Share results.

Ans.

Definition: Copies of a software repository that do not add value to the project.

Repository: Microsoft/vscode on Github: **https://github.com/Microsoft/vscode**

Results:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

Last Updated: 2018-09-21 12:35:58
----------------------------------------------------------------
Title: User profile
URL: https://github.com/microsoft/vscode/issues/53453
Last Updated: 2023-03-10 19:05:10
----------------------------------------------------------------
Title: Snippet transform leaves conditional operator
URL: https://github.com/microsoft/vscode/issues/53137
Last Updated: 2020-04-08 04:56:30
----------------------------------------------------------------
Title: Dragging files and folders onto an empty explorer ignores the files
URL: https://github.com/microsoft/vscode/issues/52875
Last Updated: 2022-05-25 18:16:24
----------------------------------------------------------------
Title: Safe File Delete
URL: https://github.com/microsoft/vscode/issues/52844
Last Updated: 2024-02-20 16:47:14
----------------------------------------------------------------
Title: Add settings editor commands to focus next and previous settings
URL: https://github.com/microsoft/vscode/issues/52815
Last Updated: 2021-10-15 17:55:24
----------------------------------------------------------------
Title: [HTML] Auto tag-closing doesn't work with undo/redo and programmatic changes
URL: https://github.com/microsoft/vscode/issues/52777
Last Updated: 2021-09-16 20:00:31
----------------------------------------------------------------
Title: Issue Reporter is unstable when number of duplicates change
URL: https://github.com/microsoft/vscode/issues/52347
Last Updated: 2021-05-12 19:55:35
----------------------------------------------------------------
Title: Add prompt to "test on insiders" to issue reporter
URL: https://github.com/microsoft/vscode/issues/52210
Last Updated: 2023-08-10 12:16:10
----------------------------------------------------------------
Title: cursor up/down is confused by selection
```