UNIVERSITY COMPUTER SCIENCE • EXERCISE SHEET

12.7 Team project

Name: _____ Class: _____ Date: _____ **Total: 24 marks**

KEY WORDS user stories • retro

Objective

Run the board, calibrate the forecast, and escalate blockers.

1 Key knowledge and worked examples

■ The flow

Stories with acceptance tests: backlog → doing → review → done; done = CI green + reviewed + merged + docs ✓.

■ Worked example: the numbers

Velocity 8 points/week; 52 points remaining = ~6.5 weeks ± 1; blockers older than 2 days escalate ✓.

2 Practice

2.1 What must every story carry before it enters doing? [3]

2.2 Compute: 36 points remaining at 8/week. [3]

2.3 What does the retro change? [3]

3 Exam-style questions

3.1 Week 6: the board shows 24 points remaining; velocity has been 8, 8, 6, and 8 over the last four weeks.

Compute the average velocity and the forecast with its error bar. State what recalibrates the estimate and when. The renewal story (3 points) has been blocked for 3 days: state the escalation and its resolution path. Define done for that story. [8]

3.2 Two ceremonies, one failure mode each.

Standup: describe the failure (status reports to a manager) and the fix (a plan among peers – what does each member say?). Retro: describe the failure (complaints without change) and the fix (one process change at a time – give an example from the course history). State what makes the board the daily truth. [7]

Solutions

2.1

- Its acceptance test (named, runnable) ✓.

2.2

- 36 / 8 = 4.5 weeks ✓.

2.3

- One process thing at a time ✓.

3.1

- Average velocity: $(8 + 8 + 6 + 8)/4 = 7.5$/week ✓.
- Forecast: $24/7.5 = 3.2$ weeks, stated as ~3 weeks ± 1 ✓.
- Recalibration: every retro, from the measured throughput ✓.
- Escalation: 3 days > 2 – raise to the owner (notifier credential decision), resolve by pairing or a decision; the course's one escalation resolved in a day ✓.
- Done for renewal: acceptance tests green (renew twice, refusal cases), reviewed, merged to main, docs updated ✓.

3.2

- Standup failure: reporting status upward – fix: each member says what I did, what I plan, what blocks me – commitments among peers ✓.
- Retro failure: venting with no change – fix: one process change per retro, e.g. the course's "PRs under 200 lines" rule ✓.
- The board is the daily truth because done inherits CI's verdict and blockers are visible – mood is not a column ✓.