COSC 499: Capstone Software Engineering Project

Dr. Bowen Hui Computer Science University of British Columbia Okanagan

Term 1 Where We're At

- By now (Milestone 2): MVP for your project
 - Review machine learning and gamification feedback



- UBC server deployment with working core features
- Team dynamics:
 - Everyone should know their teams well and plan accordingly
 - Most teams show good coding collaboration process
 - Continue discussions on testing, code reviews, work distributions
 - Peer evaluations used to weigh individual contributions, especially important for teams with 3 members



Term 2 Timeline

- Today: resume classes
- Week of Jan 27: Peer testing #1
 - Focus on workable core requirements on production server
 - Prioritize usability feedback
- Week of Feb 10: Milestone 3
 - Complete optional requirements
 - Work on polishing and refactoring
- Week of Mar 10: Peer testing #2
 - Prioritize usability feedback
- Week of Mar 31: Milestone 4 (final project)
 - No additional project work once submitted
- Final exam period: Final exam



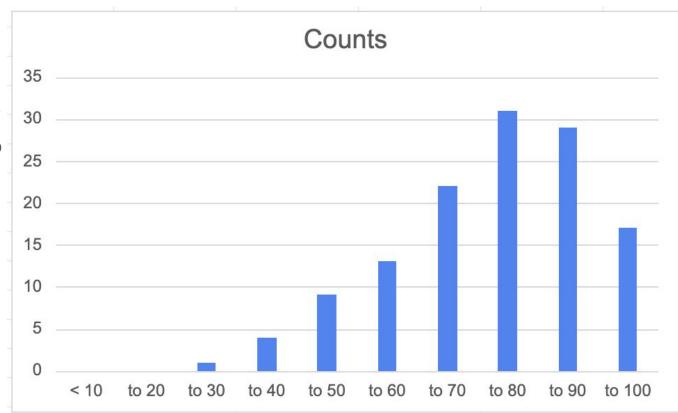
Tentative Results - PR verification pending

Midterm Review

- Histogram for both classes
 N=126 students
- Average: 72.7%

Max: 100%

- % passed: 89%
- % A's: 37%



Question 1: System Architecture

- Common mistakes for Part (a):
 - Using generic labels/diagram without applying to your project
 - Missing or poor diagram description
 - Missing significant components in diagram
 - Using incorrect system architecture than requested
- Common mistakes for Part (b) and Part (c):
 - Advantage not identified, simply explained architecture organization

Question 2: DFD

- Common mistakes for Part (a):
 - Missing data labels, and simply confused about processes and data flows
 - Confusion with data stores missing or represented as a process
- Common mistakes for Part (b):
 - Mentioned use cases not included (e.g. login, user agent) and key processes that are needed to complete the use case (e.g. text extraction, error display)
 - Missing or poor description
 - Unnecessarily representing external use cases

Question 3 and 4: Refactoring Your/Teammate's PR

- Not a code refactor
 - New feature, not an improvement
 - Others: Design in Figma, team communication, ...
- Improvement too generic
 - "some code" with no details of what was in the PR
 - Better user interface how exactly?
 - More test cases which ones?
- Poor context
- Shortcoming not explained
- Rationale or impact of refactor not provided or does not match refactor

Next Steps



- Next week:
 - How peer testing works
- Rest of this class:
 - Record PR number for Questions 3 and 4
 - Address questions regarding grading
 - Focus on mistakes and clarifying misconceptions to improve your final exam performance