Seminar Objectives

Levels of testing: integration testing.

Topics

- Integration testing strategies: Big-Bang integration, Incremental integration, Sandwich integration
- Continuous Integration.

Assignment 0 - 10-15 minutes – Control Paper on Socrative

- Lecture 1: Inspection/Review/Pair Programming
- Lecture 2: Testing, BBT
- Lecture 3:WBT

Assignment 1 – 10 minutes - Discussion

Topics

- Levels of testing
- The Testing Pyramid
- Design for Testability
  - Best practices in test code
- Integration and System Testing
  - Stub/Driver; Mock objects
  - Interface Errors
    - Read about them in Naik – pp. 159-162.
    - Examples: Misuse of Interface, Misunderstanding of Interface
  - Big-Bang integration, Incremental integration, Sandwich integration

Assignment 2 – 25 minutes – Best practices in test code

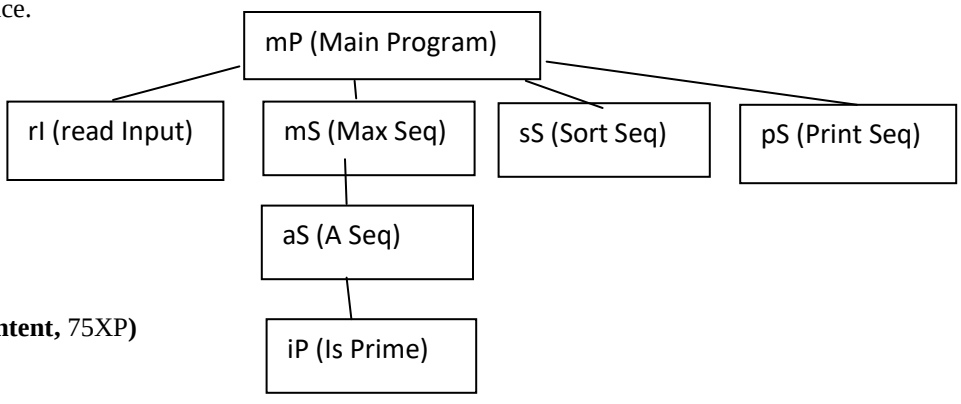
- FIRST
- Langr – pp. 51-62
- **Team work:** Poster Creation and Presentation by 5 teams – during seminar
  - Team up (5 teams – one for each letter in FIRST) – 2 minutes
  - Poster creation – 10 minutes
    - Add the Posters in Canvas (state the team members) and Share it on Discord.
  - Poster presentation – 5*3minutes=15minutes
  - 25XP for each team member.

Assignment 3 – 40 minutes – Integration testing strategies

- Big-Bang integration
- Incremental integration (Bottom-up, Top-down-depth first and breath first)
- Sandwich integration

Problem: An array of integer numbers is given. The application must:

i) compute the longest sequence of prime numbers;
ii) sort the obtained sequence;
iii) print the sequence.



Assignment 4 – 5-10 minutes – Quiz (seminar content, 75XP**)**