

## Tutorial 03: Agile Software Development

### Instructions:

Prepare the answers with a PowerPoint file. State your names and student ID on the file.

Q1. List the FIVE principles of agile methods. For what types of system are agile approaches to development particularly likely to be successful?

Q2. Extreme programming expresses user requirements as stories (or scenarios). Discuss the advantages and disadvantages of this approach to requirements description.

Q3. Given the follow scenario, suggest some test cases for testing the ATM machine.

#### **Scenario: Withdraw money from ATM machine**

1. User inserts the ATM card into the ATM machine.
2. The system verifies the card. (If the card is invalid, the system displays an error message and ejects the card).
3. If the card is valid, the system prompts the user to enter the PIN code.
4. User enters the PIN code.
5. The system verifies the account with the Bank. (If the PIN is invalid the system prompts the user to re-enter the PIN).
6. If the PIN is valid, the system prompts the user to select an option.
7. User selects 'withdraw'.
8. The ATM machine asks the user to enter the amount for the withdrawal.
9. The system checks for the account balance of the user. (If the balance is not enough, the system displays an error message indicating that withdrawal has failed).
10. If the balance is sufficient, the withdrawal is successful. The system displays the successful withdrawal message.
11. The ATM machine ejects the ATM card and dispenses the money to the user.