



BCA (Game Techonology) II () - IV (Main/Back) End Semester Examination, April 2024

BGGCCA4104: Game Testing

Time: 3 Hours

Total Marks: 60

Min. Passing Marks: 21/24/27

Question Paper ID: 000771

Instructions: Attempt all five questions. There is an internal choice either (a or b) in Q1 to Q5. Marks of each question or its parts are indicated against each question/part. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Bloom Level(BL): 1-Remembering, 2-Understanding, 3-Appling, 4-Analysing, 5-Evaluating, 6-Creating

Use of following supporting material is permitted during examination for this subject: Nil

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|------------|------------|---|--------------|-----------|-----------|
| Q1. | (a) | (i) Explain Game Development Life Cycle with a diagram. (6 marks) | Marks | BL | CO |
| | | (ii) Illustrate key components of a game and their testing requirements. (6 marks) | 12 | 2 | 1 |
| | | (OR) | | | |
| | (b) | (i) Elaborate your understanding about Software Testing , Explain 7 types of testing in detail . (6 marks) | | | |
| | | (ii) How can we say that Manual Testing is necessary for game development? Explain key points . (6 marks) | | | |
| Q2. | (a) | (i) What are Bugs? Describe Bug Life Cycle in depth. (6 marks) | Marks | BL | CO |
| | | (ii) Explain the Bug reporting mechanism used in game development. (6 marks) | 12 | 3 | 2 |
| | | (OR) | | | |
| | (b) | Create a test case for testing a new mobile game called "Space Adventure." The game involves navigating a spaceship through various obstacles in space while collecting points and power-ups. Requirements:-
Create test cases to cover various aspects of the game, including gameplay mechanics, user interface, graphics, audio, and performance.
Include detailed steps, expected results, and preconditions for each test case to guide testers during execution.
Consider different scenarios and edge cases to ensure comprehensive test coverage and identify potential issues. (12 marks) | | | |
| Q3. | (a) | (i) Describe the Process of identifying Performance bottlenecks in a game .(6 marks) | Marks | BL | CO |
| | | (ii) Elaborate the process of conducting exploratory testing to find defects in a game . (6 marks) | 12 | 4 | 3 |
| | | (OR) | | | |
| | (b) | Explain the Aspects of Stress Testing in detail. (12 marks) | | | |
| Q4. | (a) | Create a test case for check "Game Sound Effects". Requirements:-
Verify that all sound effects are played correctly and synchronized with game events. (12 marks) | Marks | BL | CO |
| | | (OR) | 12 | 6 | 4 |
| | (b) | (i) Explain the Importance of user Feedback attained by User Acceptance Testing in detail. (6 marks) | | | |
| | | (ii) What are the Iterative process of improving game design and fixing defects found during testing? Also, Define User Acceptance Testing with real world example. (6 marks) | | | |
| Q5. | (a) | Create Test Case to test Language Support. Requirements:-
Verify that the game supports multiple languages and displays text correctly in different locales. (12 marks) | Marks | BL | CO |
| | | (OR) | 12 | 5 | 5 |
| | (b) | What do you understand by Game Localization Testing? Discuss it's Key Aspects and Importance . (12 marks) | | | |

End of Question Paper