

SSD Best Practice – Teacher Commentary

Task	Mark
<p>AO1: Demonstrate knowledge and understanding of concepts, systems approaches and solutions relevant to software systems development. Level 4 - Excellent (12-14 marks) Comment Very detailed identification of client, what they want and why they require it (pg 3-5). Candidate has produced a details list of user requirements (pg 6-9) with functional and non-functional both identified (pg 10-16). A clear understanding of why elements are required for the game to make it suitable and clear link to the design produced. Content of the game clearly investigated and planned (pg 18-21) with all aspects of the game considered. Clear evidence of research into the appropriateness of the content. Initial design address the interaction between screens, the purpose of each screen and contents of each (pg 18-70)- good layout used in the report with the integration of hand-written plans and word processed explanation. Feedback from the client has been gathered to improve the initial designs (pg 67-70) - improvement clearly identified. Very details design including the screens interactions (pg 71) with the external files identified. Full explanation of each screen with clear reference to the user requirements proving all elements are appropriate (pg 72 - 77) with layout of each screen provided in detail (pg 78-106). Candidate has used text files (with rules and help details) as well as binary files (Login and high score files) with clear understand why each have been used appropriately. Storyboard details with the layout of the screens and form objects included and their formatting (78-106) - detailed final designs match the game developed and has implemented the use feedback gathered. Pseudo code has been include with a very clear understand of what each class and form should contain (pg 107-155) - good method commentary provided to show very clear understanding. Very detailed test plan to ensure that all navigation and data entry has been fully tested - with a range of test data provided (pg 157-223) - all aspects of the game fully tested with file interaction and excellent use of debugger to support testing. Many different combinations of testing the game plan included - difficult to capture but candidate has successfully included all aspects in test plan. Designs all clearly related back to the user requirements accurately.</p>	<p>14 out of 14</p>
<p>AO2: Apply knowledge and understanding to develop and implement solutions to the problems identified. Level 4 - Excellent (18-22 marks) Comment High level of game produced with a exemplary use of a high range of coding concepts. A range of data capture methods have been implemented - text entry (login screen for username and password - Login.cs), drag and drop (starting the game - GamePlay.cs), numeric up-down (Bet amount - GameMenu.cs), button clicks (throughout all forms). Range of presentation methods used (displaying labels, dataGrid, richTextBox, Textbox, PictureBox, LinkLabel, progressBar, Timer etc). Clear understanding of events through the navigation system that is buit by the candidate (through buttons, linkLabels, menuBar etc.) Excellent use of methods to build a sophisticated solution to this complex problem - candidate has demonstrated a high level of comprehension with a wide range of programming techniques. Appropriate use of classes for cards, player, serialise and filePaths to make the code efficient - tested as part of the testplan (section 7). Error trapping techniques have been applied appropriately through e.g. creating new user login file in CreateAccount.cs, validating the username method and match method in CreateAccount.cs), PopulateHighScores method in GameMenu.cs, PopulateUserStats method in GameMenu.cs, and all other files handling occurrences within the program. Menu bar has been implemented for all screens once player is logged in. Message boxes, serialisation (when communication occurs with binary file i.e. CreateAccount.cs, Login.cs, GamePlay.cs), textfiles (for help and rules content population for ease of update - RuleFacility.cs and HelpFacility.cs) manipulated along with binary files (CreateAccount.cs, Login.cs and GamePlay.cs). Randomisation used throughout (i.e. in the Shuffle method for the card class when the cards and being dealt for the player and the dealer) to allow the game to be flexible for each game play. Lists used extensively throughout game i.e. to build the deck in the card.cs and manipulated appropriately. Enumeration used appropriately in Card.cs. High level of string manipulation used throughout game. Regular expression used extensively i.e.</p>	<p>22 out of 22</p>

Validate method in CreateAccount.cs. Very good use of static class to help file paths for access to the binary and text files. Creation of data tables to populate DataGridView view in GameMenu.cs. Excellent use of graphic resources to generate a very user friendly interface. Excellent use of tool tips to help novice users of the system. Async appropriately used within DeadHand method in GamePlay.cs to ensure game is efficient and runs smoothly. Code clearly commented showing a very clear understand from the candidate.

Data entry and navigation have all been tested to ensure they work as expected - evidenced pg 224-525. Test data all provided where appropriate and detailed extreme tests carried out. Corrective action carried out to fix error (pg 510-522). Detailed design is related in all aspects back the user requirements (hence the solution is deemed to meet all the user requirements - also see evaluation).

AO3: Analyse and evaluate the concepts of software systems development and own performance in problem solving.

Level 4 - Excellent (12-14 marks)

Comment

Detailed peer testing (with evidence of completed questionnaires pg 541-558) with a detailed write up explaining the results and evidencing enhancements (pg 523 - 540). Candidate has fully planned and tested these enhancements (pg 529-530, 531-533). Detailed interpretation of how the game has been successfully implemented along with enhancements being created from testing. Details user requirements evaluation (pg 560-569) with clear understand how each requirements was achieved and the relevance to the client. Very detailed evaluation with good reflection on the process carried out (pg 570-574). Very details strengths, weaknesses and areas of improvement with good reflection on the system, the functionality and how this could be improved in future (pg 575-580).

14 out of 14