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| **Unit Number and Title** | **30: Application Development** |
| Academic Year | 2018 |
| Unit Tutor | To Hoai Viet |
| **Assignment Title** | **Assignment 2: Application Implementation and Evaluation** |
| **Issue Date** |  |
| Submission Date |  |
| IV Name & Date |  |

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| Learning Outcomes and Assessment Criteria | | |
| Pass | Merit | Distinction |
| **LO3** Work individually and as part of a team to plan and produce a functional business application with support documentation | | **D2** Evaluate any new insights, ideas or potential improvements to your system and justify the reasons why you have chosen to include (or not to include) them as part of this business application. |
| **P4** Create a formal questionnaire that effectively reviews your business application, problem definition statement, proposed solution and development strategy. Use this questionnaire as part of a peer-review and document any feedback given.  **P5** Develop a functional business application based on a specified business problem. | **M3** Interpret your peer-review feedback and identify opportunities not previously considered.  **M4** Develop a functional business application based on a specific Software Design Document with supportive evidence of using the preferred tools, techniques and methodologies. |
| **LO4** Evaluate the performance of a business application against its Software Design Document and initial requirements | |  |
| **P6** Review the performance of your business application against the Problem Definition Statement and initial requirements. | **M5** Analyse the factors that influence the performance of a business application and use them to undertake a critical review of the design, development and testing stages of your application. Conclude your review by reflectively discussing your previously identified risks. | **D3** Critically evaluate the strengths and weaknesses of your business application and fully justify opportunities for improvement and further development. |

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| **Assignment Brief and Guidance** | | |
| As the technology is being developed rapidly nowadays, FPT Co. desires to build the continuing study environment throughout the corporation. It is necessary to develop a web-based system, which manages the activity of “Training” for internal training program of the company. This system can be used to manage trainee accounts, manage trainers, manage course categories, manage courses, manage topics, assign topic to course, assign trainer to topic, assign trainee to course.  This is a system used by HR department. We have three roles in this system, an administrator, training staff and a trainer. The brief description of those roles is as follow.   1. An administrator’s role    * Can login to the system through the first page of the application    * Can create/edit/delete new user account for trainer/training staff and assign/change(if existing user) username and a password 2. A training staff’s role    * A registered training staff, who is assigned a user name and a password by the administrator logs in can create trainee accounts by entering details like trainee name, trainee accounts, age, date of birth, education, main programming language, TOEIC score, experience details, department, location, etc.    * After entering successfully all details for trainees, his/her details are then stored in the database. The training staff is given a list of trainees for him to view and search. From the list of trainees, he can also search by trainee account, programming language, TOEIC score…    * Can update, delete trainee accounts    * Can manage course categories such as searching, adding, updating and deleting course categories. Course category includes the information such as course category name and descriptions.    * Can manage courses such as searching, adding, updating and deleting courses. Course includes course name and description.    * Can add topics such as topic name and topic descriptions into a course, add courses into a category.    * Can manage trainer profile such as adding, updating and deleting the information: Trainer name, External or Internal Type, working place, telephone, and email address.    * Can assign trainer to a topic.    * Can assign trainee to a course. 3. A trainer’s role    * In the same system, the trainer who have been registered by the administrator can login and can update his profile such as Trainer name, External or Internal Type, education, working place, telephone, and email address.  * Can view courses which have a topic he is assigned to.   Your manager suggests that this would be a great opportunity for you to demonstrate your capabilities by designing and developing the application. After considering, you decide to do the project. The project consists of 4 steps which is divided into two phases. After two first steps of analysing and designing the solution, now it is time to implement and evaluate the application. | | |
| **Assignment Guidance** | | |
| **Task** | **Assessment Criteria** | **Requirement** |
| 1 | **P4** Create a formal questionnaire that effectively reviews your business application, problem definition statement, proposed solution and development strategy. Use this questionnaire as part of a peer-review and document any feedback given. | 1. Questionnaires to peer-review your application |
| 2 | **P5** Develop a functional business application based on a specified business problem. | 1. A runnable implementation of the application |
| 3 | **P6** Review the performance of your business application against the Problem Definition Statement and initial requirements. | 1. Test plan 2. Test results |
| 4 | **M3** Interpret your peer-review feedback and identify opportunities not previously considered. | 1. Peer-review feedback and Evaluation on feedback 2. Recommendation for improvements |
| 5 | **M4** Develop a functional business application based on a specific Software Design Document with supportive evidence of using the preferred tools, techniques and methodologies. | 1. Sequence diagrams to show business process of important application functions |
| 6 | **M5** Analyse the factors that influence the performance of a business application and use them to undertake a critical review of the design, development and testing stages of your application. Conclude your review by reflectively discussing your previously identified risks. | 1. Evaluation on test results |
| 7 | **D2** Evaluate any new insights, ideas or potential improvements to your system and justify the reasons why you have chosen to include (or not to include) them as part of this business application. | 1. A presentation about your application |
| 8 | **D3** Critically evaluate the strengths and weaknesses of your business application and fully justify opportunities for improvement and further development. | 1. Evaluation of your application in the presentation |

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| **Submission Format** |
| The submission is in the form of documents/files:  1. A report document including required evidences  2. An installable and executable version of your application (P5)  3. A presentation if necessary (D2, D3)  You are required to make use of headings, paragraphs, subsections and illustrations as appropriate, and all work must be supported with research and referenced using the Harvard referencing system. |