**CP5046** ASSESSMENT TASK 1: **Project Documentation**

This assessment task has been prepared by Dr. Dmitry Konovalov for James Cook University.  Updated 7 April 2020.

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**ASSESSMENT TASK 1:  PROJECT DOCUMENTATION**

|  |  |
| --- | --- |
| **Aligned subject learning outcomes** | All |
| **Group or individual** | Group |
| **Weighting** | 20% |
| **Due date** | Week-7 Friday 9am 12-Apr-2019 |

**ASSESSMENT TASK 1: DESCRIPTION**

This task is the ***iteration-1*** in terms of the Agile Software development. It defines the initial project specifications including goals, deliverables, and planning for ***iteration-2*** (***alpha release***).

**ASSESSMENT TASK 1: CRITERIA SHEET**

**[\_\_\_\_\_/20 marks] Assignment is done in a group with 2-4 students.**

**Group members:**

|  |  |  |
| --- | --- | --- |
| **Student Number** | **Student Name** | **Project Role** |
| 13712026 | Chagi udugamasooriyage | Analysing data  Converting dataset into Graphs  Help with website design  Documentation  Website testing |
| 13760197 | Jishnu Yalamarthi | Analysing data  Data cleaning  Converting dataset into graphs  Website designing  Networking |
| 13722424 | Pawan Dumpa | Analysing data  Creating database  Visualising data on the website  Website testing  Documentation |
| 13758003 | Rishabh Thakur | Analysing data  Research  Visualising data on the website  Manage database  Help with website design |
| 13760220 | Sushanth Erapuram | Analysing data  Research  Help with website design  Website testing  Handling team meetings and project tasks |

**[\_\_\_\_/Prerequisite for marking]**Assignment is completed using electronic copy of ***this*** document and submitted to LearnJCU electronically.One submission per team.

**[\_\_\_\_\_/20 marks] Project description for non-ICT-technical stakeholders and general audience.**Write here: minimum **TWO** pages, maximum **TEN** pages.

* [\_\_\_/10] Justification for the project: Why a new ICT solution is required. Include some market and ICT technology research, plus available ICT solutions.

**Introduction: Road safety awareness through real-time data projection**

The goal of the project is to acquire and relay the data obtained from sources of Australian government about road accidents on Australian roads from [Data.gov.au](https://data.gov.au/dataset/ds-dga-5b530fb8-526e-4fbf-b0f6-aa24e84e4277/details?q=crash) . The data is relayed in both graphically and verbally to make the user comfortable in understanding the data. The projected data consists vital information about date of accident, fatalities, accident type, number of vehicles involved and location with time. This project is being carried out under the guidance & direction of Dr. Dmitry Konovalov who is also a lecturer at James Cook University, Townsville, Australia.

**Aim of the project:**“Road Safety Awareness” is a website mainly for the computer users and by using responsive web feature this can be use from tablets and phone with user friendly manner. This website will visualize the major risk areas of road accidents in Australia by demonstrating charts and tables. Moreover, there will be various filtering options for users to obtain particular graphical representative as of their choices. The website will use data obtained from Tableau which allows to visualize the data from imported files. Then these records will be integrated into the website using embedded analytics. The overall concept of this website is to give intensive knowledge about road accidents of Australia in descriptive and easy to understand method which help the users to reduce their risks on road accidents.

**Reason for new project:**

Generally, there are so many accident-prone spots on a road which the driver is unaware of, due to that many of the accidents will takes place both minor and major accidents. Thus, in order to help the people who are driving a vehicle in unknown road or driving for the first time in that road will get an information by proposed project. Hence the user can take preventive measures or can be more cautious in their driving. Using our proposed website information, it will help them to know what about kind of road it is and number of accidents previously occur to be more careful.

**Technology research and current solutions available:**

* [\_\_\_/5] Project goals: Describe exactly what and how your proposed ICT solution will be delivered to the client.

|  |  |
| --- | --- |
| **Goal** | **Goal Description** |
| 1 | Develop a Kaggle notebook to visualize the dataset |
| **2** |  |
| 2 | Display a live updating dashboard of road accident in Australia |
| 3 | Develop filtering options to obtain users customized trends of road accident |
| 4 | Can obtain users given two locations high risks accidents zones |

* [\_\_\_/5] Justify between two and four major milestones with timeline. Is your proposed schedule too ambitious (over-optimistic) or too conservative?

**[\_\_\_\_\_/20 marks] Project scope of the full final release (Project audit at the end of CP5047 subject). Clearly specify the scope of alpha-release (Project audit at the end of CP5046 subject)**Write here: Minimum **TWO** pages, maximum **TEN** pages.

**Available days:**PASS-level (minimum) effort is 1-day and maximum is 3-days per teaching week (assume 12 weeks per study period), per team member. For example: 12 x 2 = 24 days is the minimum for a team with 2 students, 12x2x3=72 days is the maximum. The available days must match the SUM of your user story estimates below.

|  |  |  |
| --- | --- | --- |
| **User Story Title** | **Description** | **Effort** |
| Planning in brief | As a user I want to display the road accidents statistical data in a pleasing manner on a website using charts/graphs to the end users. | 05 Days |
|  | As a user I want to display accident prone zones on roads for end user in each state of Australia. |  |
| Choosing the dataset | As a user I want to enter two locations name to website so then user will be able to get given two locations accident zones. |  |
| Visualizing demo dataset | I want all the team members to get used with operating the tools on demo data to know every features of the tools. | 05 Days |
|  |  |  |
| Prepossessing dataset | Clean data and remove null values, aggregate and discretise the data for better input. | 12 Days |
| Data analysis | Model building and visualise the data.  Create a database. | 15 Days |
| Data visualization | Using Tableau to discover meaningful data and interpret meaningful graphs | 05 Days |
| Website Implementation | Website will be create by using WIX. | 12 Days |
| Database integration | Connect the database to web application | 07 Days |
| Dashboard implementation | Based on the analysed and visualised data, create the dashboard of web site. | 20 Days |
| Filter options implementation | Filter options designing and visualize the trends | 15 Days |
| User input functionality | Identify and display high risks zones based on the user given two locations | 15 Days |
| Testing | Test all the data representation and functionalities to make sure the system working as expected and confirm whether all the requirements are covered. | 07 Days |

**[\_\_\_\_\_/20 marks] Project sponsor/client/customer signed/agreed to the scopes of the alpha-release and the final-release.**Cut/Paste clients’ email here, or show signed the preceding “**Project scope**” to your marking lecturer.

**[\_\_\_\_\_/20 marks] Project development and release ICT infrastructure.** This must include development environment, programming languages, source code repositories (Configuration Management), project collaboration tools, and development tools. Write here: minimum **TWO** pages, maximum **TEN** pages.

* [\_\_\_/5 marks] **Configuration Management**/version control, e.g. git, github, heroku, bitbucket;

* [\_\_\_/5 marks] **Project tools**. Programming languages/IDEs, e.g. php/WebStorm, java/IntelliJ; Building tools/procedures, e.g. git-push to heroku; e.g. how to set-up your development environment for a new team member

* [\_\_\_/5 marks] **Testing** tools, data and procedures (what and how you are planning to test), e.g. junit; Client testing and access to release, e.g. domain name, domain hosting; Client training document, and procedures; Release testing tools, data and procedures (what and how you are planning to test);

* [\_\_\_/5 marks] **Prototypes are demonstrated to justify the proposed ICT solutions**;

**Marking Rubric for Project Documentation:** This assessment rubric provides you with the characteristics of exemplary, competent, marginal and unacceptable work in relation to task criteria.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Exemplary (DISTINCTION-level)** | **Competent (CREDIT-level)** | **Marginal (PASS-level)** | **Unacceptable (FAILED-level)** |
| **Assignment is done in a group with 2-4 students.** | **20**  Group demonstrated **exemplary ability**to work collaboratively, e.g. all team members always attended the same workshop | **15**  Group demonstrated **competent ability** to work collaboratively, e.g. all team members nearly always attended the same workshop. | **10**  Group demonstrated **marginal ability** to work collaboratively, e.g. all team members sometimes attended the same workshop. | **0**  Group did not demonstrated ability to work collaboratively. |
| **Project description for non-ICT-technical stakeholders and general audience** | **20**  Project is described **very clearly**for a non-technical audience. No presentation and style errors | **15**  Project is described clearly for a non-technical audience; or Outside page limits, or Minor presentation and/or style errors. | **10**  Project is not described clearly. Outside page limits; or Major presentation and/or style errors. | **0**  Not done, or done unacceptably. |
| **Project Planning and scope** | **20**  All user stories are correct, and correctly estimated. | **15**  Most user stories are correct, and correctly estimated. | **10**  More than half of user stories are correct, and correctly estimated. | **0**  Less than half of user stories are correct, and correctly estimated. |
| **Project client signed the scope** | **20**  Intellectual property (IP) in client agreement; Clear evidence of clients priority and ranking of user stories; Signed and agreed scope. | **15**  Some evidence of clients priority and ranking of user stories. Signed and agreed scope | **10**  No evidence of clients priority and ranking of user stories.  Signed and agreed scope. | **0**  Not done, or done unacceptably. Project scope is not signed. |
| **Project development and alpha-release ICT infrastructure** | **20**  Description very clearly communicates exemplary ICT solutions. | **15**  Description clearly communicates competent ICT solutions. | **10**  Description communicates ICT solutions. | **0**  Not done, or done unacceptably. |

**REFERENCES**