**Apprenticeship Project (Project) – Progress Report (Max 3 pages)**

|  |  |
| --- | --- |
| **Learner name:** | Andy Brown |
| **Learner ID:** | 1910332 |
| **Programme start date:** | September 2019 |
| **Project title** | End Point Assessment Quality |
| **Academic Supervisor:** | Maysson Ibrahim |
| **Work-place Supervisor:** | John Pritchard |
| **Work-place Supervisor’s email:** | john@accelerate-people.co.uk |

|  |
| --- |
| **Project Overview (max 200 words):** Provide a summary of project’s overall aims and objectives (may refer to Project’s ToR).  “Accelerate People” run an Independent Assessment service for apprentices completing Digital Apprenticeship Standard (see <https://www.instituteforapprenticeships.org/apprenticeship-standards/?routes=Digital> ). Apprentices are trained by separate companies and gain work experience through an apprenticeship role. Apprentices are independently assessed by “Accelerate People” to judge their competence. Hence “Accelerate People” is an “End-Point Assessment Organisation“(EPAO).  Accelerate People require dashboards and analytics including:   1. Systems to measure the performance of multiple-choice exams hosted on Moodle   Benefits/Drawbacks  Moodle allows complex questions types including mathematics/coding. Hosting a system is cheap compared to alternatives ( [www.questionmark.com](http://www.questionmark.com)). It also allows access to all statistics. Drawbacks include setup time and staff training.   1. Implement a dashboard displaying:    1. Grades per standard.    2. Pipeline of End Point Assessment expected in the next three months by       1. Standard.       2. Training provider.    3. Predicted/Processed revenue   The number of assessments completed/predicted can be used to calculate the processed/predicted revenue (each assessment in a set payment).  Benefits/Drawbacks  Excel is simple and cheap. Automated systems save time but require additional costs and training.   1. After a “Professional Discussion” a survey is sent to the apprentices with an “any other comments” field. Sentiment analysis will be performed on this data.   Benefits/Drawbacks  Python may be difficult to automate/operationalise. |
| **Summary of significant changes, if any, to the Project’s scope:** Provide details of any changes to the project’s scope since approving the Project’s ToR and confirm whether the changes were approved by the supervisors.  There are no changes to the project scope, however there is an additional piece of work outside the scope of this project to look at the data, reporting and forecasting across the organisation. |
| **Summary of tasks completed:** Provide a summary of key tasks completed by the time of submitting the progress report. These should include both practical work and report writing.    The project has been planned to use Agile methodology and record the information in Jira. Above is visual representation of the project so far “done” labelling a completed tasks “to-do” identifying an outstanding task.  Epics, major task groups (purple bars) contain tasks (text). These tasks are completed in sprints. Above is an overview of the current project progress which is discussed below.  **Project Scope: General**   * Project initiation   + During initiation following tasks were completed   **Explore the data:** The available data was explored, and a visual overview created  see below. Schemas for each set of data were documented in Excel and these included explanations of the relevant columns. Ace360 holds all the apprentice’s information and links to our internal excel tracker. Data in Ace360 is exported to Excel daily by the “Accelerate People Administrator”. And links by Ace360ID to our internal Excel tracker. Pipeline data, predictions about the number of apprentices likely to come through and is documented in PowerPoint. Finally, the exam results per-person and per-questions can be downloaded to CSV files from Moodle.     * + **Create project folders / GitHub site**     - A set of folders were created and linked to a private GitHub site. PowerBI testing reports were stored in PowerBI however when student data was used the report was stored in company SharePoint for security, therefore no student data was uploaded to GitHub.      * **Identify required systems, software, hardware**   + **Complete evaluation of software for reporting and analysis**: A review of the systems needed to deliver was the project was completed and the following was chosen for use with the project     - Moodle Test Systems – Installed on VMware ESXI – virtualisation and Ubuntu OS.     - Moodle live – hosted by a third party - https://assessment.accelerate-people.co.uk/     - For analysis Python/Spyder and Jupyter Notebook     - PowerBI Desktop – For data transformation and Reporting     - Power BI Service – Trial – Used for sharing and management of dashboards.   + **Meet with stakeholders**     - A meeting was help with the “Director / Co-Founder” to agree the approach and the use of PowerBI for reporting. Initial meeting with “Administrator” and the “Lead IQA” to investigate the feasibility of automated reporting. Consent was given in all cases * **Design Moodle Site, Questions and Statistics**   + **Create Moodle test system:** A Moodle test site has been installed on VMWare Esxi on the Ubuntu operating systems. This allows changes to be made without impact the live system.   + **Create automated test runner:** Python and Selenium have been used to create a test harness so that large sample sets of test data can be generated before the system goes live.   + **Design Moodle statistics:** The statistics used for question analysis were decided and will use “Classical Test Theory” as cited (Ding and Beichner, 2009). The analysis of the results and report automation will be completed using Python / PowerBI during the next phase. * **Design Ace360 Reporting and Statistics**   + **Document data schema:** The data scheme for A360 and the internal tracker were documented so that reporting could be completed.   + **Design reports:** The report designs were based on general reports created by the quality team     - **Grades per standard.**      * + - **Pipeline of End Point Assessment expected in the next three months**      * + - **Predicted/Processed revenue**      * **Design Student Survey Sentiment Analysis**   + The data scheme was created reflecting the data collected from SharePoint surveys. * **Design Data Security**   + Design security for the development systems. Development code and project design were stored on local hard drive and for security synched to a private GitHub site. PowerBI reports storing apprentice’s data includes “Personal Identifiable Information (PII)” therefore these are stored on the companies SharePoint site with access only for those within Accelerate-People. In the first step of the PowerBI transformation PII information was removed leaving only an ID. * **Training**   + Design the training needed for Accelerate People team to execute and modify reports and manage Moodle administration. Consultation with each group will be conducted to create a skills gap analysis. The training will be for four broad groups Report Administrators, Moodle Administrators, Company Executive, Apprenticeship Assessors: * **Report Administrators** will be identified by the leadership team and will develop skills to execute, maintain and design reports. This will eliminate any individual as a single point of failure. * **Moodle Administrators** will have the skills to manage the upload of questions, the design of quizzes and will be able to interpret statistics so they can manage quality. * **Company Executives** will have the skills to execute reports and have an overview of the technology, purpose, and costs. * **Apprenticeship Assessors** will have the skills to execute reports of their predicted workload for long term planning. |
| **Summary of tasks to be completed:** Provide a summary of key tasks remaining to be completed. These should include both practical work and report writing.  The following are the tasks that are still to be completed   * Design Moodle statistics   + Whilst the approach to Moodle statistics has been documented implementing the code in Python and operationalising that in PowerBI, which supports python code is still to be completed. * Statistical Analysis of PMDF by Training Provider and Standard   + Reporting for Pass Merit Distinction has been created but analysis is yet to be implemented so that statistically significant differences in training providers can be reported on. * Review legislation   + A thorough review of GDPR need to be conducted to verify if the approach to data analysis could breach regulations. * Create strategy for security   + How to share and manage reporting data needs to be decided, either to use PowerBI desktop and basic file permission or to implement The PowerBI service so that reporting and reporting security can be used. * Design Organisational data handling and reporting   + See above * The remaining steps are to document the above   + Document reporting system   + Document organisations approach to security   + Document organisations approach to data |
| **Risk assessment:** Provide a risk assessment for the key tasks remaining to be completed. Use own work-place practice for risk assessment. |
| **Reflections:** Provide a self-assessment of project’s progress and make suggestions to enhance the work over the remaining period.   * What has gone well   + The initial investigation if the software including testing that PowerBI support Python/Automated reporting and the built-in functions allow data transformation required for standard reporting.   + The installation of the Moodle test system and the Quiz automation module which allows offline design an testing * What areas need to improve   + Engagement with the Administration and Quality team, to identify how PowerBI can automate manual reporting.   + Engagement with the “Director / Founders” agree RoadMap for company reporting and associate costs   + Collection of Apprenticeship Pipeline data, which is inaccurate, stored in PowerPoint which is hard to process and not broken down by standard. This will need a process change within Accelerate-People. |
| **e-signatures:**  John Pritchard – Workplace supervisor  Project amended to include training as requested in the email below.   |  |  | | --- | --- | | From: | John Pritchard | | Sent: | 20 December 2020 14:20 | | To: | Andy Brown; Maysson Ibrahim | | Subject: | RE: MSC Project Progress Report: Your email confirmation please |   Hi Andy,    Agree with all that you have summarised. One thing for me missing, I have allocated this task to you to manage and on completion feedback and where necessary train staff. I do think this should be mentioned in the report as key to see you are planning and managing the task.    Best regards,    John    John Pritchard  Director / Co-Founder        Accelerate People Ltd | Accelerate-people.co.uk  Scale Space  58 Wood Lane  London  W12 7RZ    07850181828    The Accelerate People Safeguarding & Prevent Hotline is available 9am – 5:30pm Monday to Friday on 07572 878143 or email us at Safeguarding@acceleratepeople.co.uk  Outside these hours you can contact any of the following free: SAMARITANS on 116 123,  MIND on 0300 123 3393, FRANK on 0300 123 6600, CHILD LINE on 0800 1111 and SHOUT by texting Shout to 85258    From: Andy Brown <AndyB@accelerate-people.co.uk>  Sent: 18 December 2020 17:16  To: John Pritchard <John@accelerate-people.co.uk>; Maysson Ibrahim <maysson.ibrahim@buckingham.ac.uk> Subject: MSC Project Progress Report: Your email confirmation please    Hi John/May,    As you know I’ve been working on my Final Project and have completed my progress report. As part of the report, I need a return email just to confirm you (as project sponsors) have read the attached document. The email becomes an e-sig which I’ll embed into the document. Any questions let me know.    Have a good Christmas,      1  Andy      Andy Brown  Independent Assessor        Accelerate People Ltd | Accelerate-people.co.uk  Scale Space  58 Wood Lane  London  W12 7RZ   T: 07813 277161   The Accelerate People Safeguarding & Prevent Hotline is available 9am – 5:30pm Monday to Friday on  07980 910374 or email us at Safeguarding@accelerate-people.co.uk  Outside these hours you can contact any of the following free: SAMARITANS on 116 123, MIND on 0300 123  3393, FRANK on 0300 123 6600, CHILD LINE on 0800 1111 and SHOUT by texting Shout to 85258    Maysson Ibrahim - Academic Supervisor   |  |  | | --- | --- | | From: | Maysson Ibrahim <maysson.ibrahim@buckingham.ac.uk> | | Sent: | 20 December 2020 17:20 | | To: | Andy Brown; John Pritchard | | Subject: | Re: MSC Project Progress Report: Your email confirmation please |   Hi Andy,    Thanks for sending this. I'm happy with the report.    BW,  May    Dr Maysson Ibrahim  Lecturer, School of Computing  University of Buckingham    Note: I work part-time (Wednesdays, Thursdays, and Fridays) otherwise I will respond to emails as soon as possible.  From: Andy Brown <AndyB@accelerate-people.co.uk>  Sent: 18 December 2020 17:15  To: John Pritchard <John@accelerate-people.co.uk>; Maysson Ibrahim <maysson.ibrahim@buckingham.ac.uk> Subject: MSC Project Progress Report: Your email confirmation please    This email originated outside of the University of Buckingham. Unless you recognise the sender, and know the content is safe, do not click any links or open attachments. Please contact the IT Services Helpdesk if you have any concerns about the content of this email.          Hi John/May,    As you know I’ve been working on my Final Project and have completed my progress report. As part of the report, I need a return email just to confirm you (as project sponsors) have read the attached document. The email becomes an e-sig which I’ll embed into the document. Any questions let me know.    Have a good Christmas,      Andy      Andy Brown  Independent Assessor      1    Accelerate People Ltd | Accelerate-people.co.uk  Scale Space  58 Wood Lane  London  W12 7RZ   T: 07813 277161   The Accelerate People Safeguarding & Prevent Hotline is available 9am – 5:30pm Monday to Friday on  07980 910374 or email us at Safeguarding@accelerate-people.co.uk  Outside these hours you can contact any of the following free: SAMARITANS on 116 123, MIND on 0300 123  3393, FRANK on 0300 123 6600, CHILD LINE on 0800 1111 and SHOUT by texting Shout to 85258  Buckingham.ac.uk      To hel  p  protect your  privacy  ,  Micros  oft  Office  prevented  automatic  download of  this picture  from th  e  Interne  t.  Grey li  ne    To hel  p  protect your  ,  privacy  oft  Micros  Office  prevented  automatic  download of  this picture  e  from th  Interne  t.  Facebook  logo      To hel  p  protect your  ,  privacy  oft  Micros  Office  prevented  automatic  download of  this picture  from th  e  Interne  t.  Twitter logo      To hel  p  protect your  privacy  ,  oft  Micros  Office  prevented  automatic  download of  this picture  e  from th  t.  Interne  Instagram  logo      p  To hel  protect yo  privacy  ,  oft  Micros  Office  prevented  automatic  download  tur  this pic  e  from th  t.  Interne  Youtub  e l   |  |  | | --- | --- | | To help protect y privacy, Microsof Office prevente automati downloa  this pictu from the Internet.  Grey line |  | | To help protect your privacy, Microsoft Office prevented automatic download of this picture from the Internet.  The | To help  privacy Micros Office  from th Interne  First fo  r |   protect your  ,  oft  prevented automatic  University of Buckingham logo download of this picture teachinexcellencee t.g  The University of Buckingham respects your rights with regards to data privacy and data protection. Please review our privacy notice, which informs you how we collect, store, use, share, process and protect your personal information. It also tells you how you can access and update your personal information and make certain choices about how your personal information is used. By communicating with the University, using its websites, making applications or by otherwise giving us your personal information you are accepting the practices described in this Privacy Notice. If you do not agree to this Privacy Notice, please do not give us any of your personal information. |

|  |  |
| --- | --- |
| **Signature (Learner\*)** | Andy Brown |
| **Signature (Academic Supervisor\*)** | maysson.ibrahim@buckingham.ac.uk |
| **Signature (Work-place Supervisor\*)** | john@accelerate-people.co.uk |
| \*e-signatures or email confirmations are sufficient | |