IN PARTNERSHIP WITH PLYMOUTH UNIVERSITY

Name: J.D Victoria
Student Reference Number: 10898688

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Group work: please list all names of all participants formally associated with this work and state whether the work was undertaken alone or as part of a team. Please note you may be required to identify individual responsibility for component parts.

- J.D Victoria – 10898688
- S Balasooriya – 10898419
- J.S Thirimanna - 10898680
- M.M.I.U Bandara – 10899166
- M.F.M Ruhaib – 10899682
- W.I Avarjana - 10899163

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Signed on behalf of the group: Victoria

Individual assignment: *I confirm that I have read and understood the Plymouth University regulations relating to Assessment Offences and that I am aware of the possible penalties for any breach of these regulations. I confirm that this is my own independent work.*

Signed :

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Introduction and Overview

Back in the day, since there were no proper technologies to build a CV, people used to create them manually. A CV has a proper standard format and there are some vital information that must be included in it, but due to a lack of understanding of formatting guidelines and poor phrasing/presenting practices, they find it difficult to craft a professional and well-structured CV. This led to many undergraduates and graduates facing challenges in creating effective CVs due to limited resources and lack of guidance, often resulting in improperly formatted or incomplete CVs. Although the emergence of modern technology introduced various software solutions such as Online Design tools and Word processors for CV creation, the complexity of these tools and sometimes excessive freedom often compounded the issue.

This sparked us with an idea and after having an initial meeting with the Manager of Student Recruitments/Enrolment at NSBM, a major issue was noticed while going through the multiple CVs made by the NSBM undergraduates, and it was that the majority of them lacked proper structure, necessary information, professional experience, and clearly ranked skills. These types of CVs could create a problem when it comes to recruitment since it would make it harder for recruiters to grasp their candidate's capabilities, which will reduce their likelihood of being shortlisted for a position or considered for employment. So, the request we received from the NFORCE of NSBM is to come up with a solution to prevent graduates and undergraduates from making these types of unprofessional CVs that do not meet the requirements and instead, start preformatting the CVs and questioning the candidates on various aspects to fill in those preformatted slots which would reduce the formatting errors cause from their end.

To solve the above problem faced by the undergraduate and graduate community and to provide a solution to the request made by the NFORCE of NSBM, we as Software Engineering undergraduates came up with an idea to create CV building platform based on the standards of the corporate world named **'Persona Prep'**.

Apart from that, another issue that the NFORCE faced was when the industry companies would request them to recommend candidates with a specific skill set, searching through a list of CVs was a hectic task and matching skill was the next. So, they did require a way to easily filter such candidates as well. To our surprise, we were able to solve the above filtration issue faced by NFORCE as well because it was already in our scope as our platform stores all the necessary data harvested from the CVs which we can use to filter such attributes upon the creation of a CV.

Furthermore, we also decided to include an AI-powered Interview Simulator feature to familiarize candidates with an interview question line-up catered to their field and expertise based on details entered in their CV. Such a feature can be used before they faced one with a recruiter since it would

put out their stress, fix their lack of repetitive practice, poor time management, low self-confidence and many more reasons that result in them messing up a interview.

Starting from first analyzing this issue to only be one at NSBM, we later on went to understand, that this was a widespread issue ranging across various universities within Sri Lanka after we released a survey on "The Difficulty/Experience of Creating a CV for Undergraduates". So, we decided to implement all these aspects into a web application, to put forward as a submission for this module since it's unique and no other application has facilitated such a feature combination with easy hierarchical management.

Project Mission, Vision, and Core Values

Mission: To empower undergraduates and recent graduates by providing them with the necessary tools and knowledge to create competitive CVs and successfully training them to face corporate interviews which will help them in taking the first step towards their corporate careers.

Vision: Persona Prep aspires to be the premier platform that empowers NSBM undergraduates and recent graduates on their journey into the corporate world in Sri Lanka. As Persona Prep, we envision a future where every individual is hoping to enter the corporate world has the necessary tools, knowledge, guidance, and confidence to craft exceptional CVs, excel in interviews, and achieve their aspiring careers.

Core Values: As a platform, hoping to empower the future Domestic workforce, we maintain and follow the following Core values in Persona Prep;

1. **Empowerment:** We believe in empowering undergraduates and Fresh graduates to take control of their future by providing them with the necessary tools and guidance to take the first step towards the corporate world.
2. **Inclusivity:** We aim to be inclusive and accessible to all undergraduates and fresh graduates from all academic and economic backgrounds, ensuring equality for all individuals.
3. **Integrity:** One of our key values is integrity, where we aim to operate with utmost integrity, ensuring that all guidance and resources that we provide are ethical and legal.
4. **Professional Competence:** As a platform aiming to empower the future workforce, we are committed to continuous learning and improvement in our services and resources for both our users and our team.

Fig 1 – Application branding logo

Objectives

1. **In-App Profile Management**

   Through Persona Prep, our users have the ability to maintain all their information including their CV and Academic skills/qualifications along with their experiences through our dynamic web application. This will ensure that all the important and necessary information relevant to the corporate world of personnel is stored in each individual's profile safely and conveniently.

2. **CV Generator**

   Our primary motive is to help undergraduates and graduates who are keen on getting into the corporate world, build the most competitive CVs as per current corporate trends and standards. This will ensure that their CVs are up to date and meet the expectations of the corporate field in which that individual seeks employment opportunities.

3. **Job skill analysis**

   Our motive is also to help undergraduates and graduates understand the correct and most suitable set of skills that is required for the various roles they are applying to this is by gathering all their hard skills, technical skills and soft skills and matrix matching them with the job they are applying for to give them a clear overview if they really match.

4. **Resume Template Bank**

   As a software which has the motive of preparing individuals for the corporate world, we also possess a Resume Bank which will enable our users to select a suitable CV template from the variety of choices that are available in the resume bank. This provides a competitive edge to our users among other candidates when portraying their CVs as per those specific corporate sector's expectations.

5. **Interview Simulator**

   Our AI-powered interview simulator feature provides simulated mock interviews which consist of prototype dynamic interview questions that are asked in the current corporate world. This ensures that our users will have prior experience in an interview before facing the real-life interview as well. In addition, this will ensure a boost in the confidence of the user and will give enough time to practice the user's shortcomings before entering into the real-life interview. Apart from the above, this feature will also provide the relevant transcript of the conducted simulated interview, so that the relevant user can use it for reference purposes.

6. **Interview Question Library**

   In Persona Prep, apart from the simulated interviews, we also provide a customized interview question bank which consists of previously conducted best-simulated interviews for our valuable users based on the relevant corporate industry which they target. This will ensure that, apart from the oral simulated interviews that a user experienced personally, he is also getting used to interview questions that were faced by previous best-candidate users. This will improve the user's overall performance in their actual final interview.

7. **Feedback and Consultancy**

   In Persona Prep, our interview question bank and resume bank will be constantly updated by prior user feedback and will also consult corporate executives. This will ensure that the simulated interviews and resume templates we offer stay current and in line with the latest corporate trends and expectations. As a result, our users will receive the most related questions and templates to practice, ultimately improving their chances of success in the highly competitive corporate job market.

8. **Data-Driven Insights**

   Our software provides data-driven insights to career guidance units of NSBM, which will help them to get a deeper understanding of each graduate or undergraduate regarding their strengths, skills, and areas of improvement. Through the above comprehensive analysis, the career guidance unit will be able to specifically recommend the most suitable set of users (undergraduates/graduates) for the career vacancies that arise in the corporate world.

Target Users

The target users and the scalability of our project are planned and developed in a way, in which it expands over time based on three major phases as given below; Each of these phases is planned to fulfill different segments of target markets sequentially.

Phase 1

    Students of the Faculty of Computing : Initially the focus of this application would be towards the Second- and Third-Year students inside the Faculty of Computing at NSBM to build CVs based on their skills for their career requirements.

    Career Guidance Unit of NSBM: The NFORCE of NSBM will have the feature to hand-pick students required based on their skills to cater to the upcoming job requirements.

Phase 2

    Students of all faculties at NSBM: The entire app will be open to all the graduates and undergraduates at NSBM despite their faculty with features to meet their expertise. They also will be able to make well-structured CVs and improve their skills with the AI-powered Interview Simulator in relation to their area of study.

Methodology

After considering the project scope and complexity, we understood that the scope and deliverables could be subjected to changes as per the client's requirements. Since we need to be ready for these changes, we thought of going with a methodology that would cater to the dynamics of our project, which in our case is the Agile Scrum Methodology. With this, we can easily break down the project, deliver a higher quality product, and keep our client up to date with the project.

Project Management tools:

To manage the time and assign tasks and monitor the progress of the tasks we have chosen the software Trello since this software is flexible and it gives us the ability to attach files. This will be very useful for our project to meet the deadline at the proper time and also help us to manage the workload effectively furthermore Trello provides the feature to connect with other software that we use to manage the project.

Communication media:

As a medium of communication, we decided to use WhatsApp and Microsoft Teams. Since both are popular and used daily, we can quickly get a message through and make decisions. Meanwhile, it provides features for sharing documents, audio recordings, and other media making it easier for us to share and receive files with each other.

We will be using Microsoft OneDrive as a source for storing documents and other materials related to our project. We will use Microsoft SharePoint to share access easily, quickly, and securely to the project materials inside project folders.

Version Control:

Our code management and change tracking will be streamlined through the powerful version control system GitHub. With GitHub, we can maintain a well-organized codebase, track, and document all modifications, collaborate seamlessly with the team, and ensure reliability and transparency.

Project Benefits

1. **Create professionally competent CVs**

   Users can create well-structured and visually appealing CVs with ease which will ensure that undergraduates and fresh graduates are able to make a strong first impression on potential employers. This will pave the way for the users to take their first step towards their Corporate Careers.

2. **Improved Interview and Soft Skills**

   The AI-powered Interview Simulator provided by Persona Prep will provide realistic practice sessions for the users which will eventually help the users to refine their interview techniques and get a clear understanding of corporate interviews. Apart from the above, this will also boost confidence and reduce anxiety among the users regarding interviews.

3. **Tailored Content**

   In Persona Prep, we provide tailored content to our users by analyzing user profiles and information. This will ensure that all the guidance, tools, and resources provided by us are on par with the corporate field that the specific user is aspiring to reach.

4. **Time - saving**

   Creating a CV from scratch can be time-consuming and can be a hassle among many academic works. Hence, Persona Prep streamlines the process of creating competitive CVs which will eventually save valuable time for our users.

5. **Cost Effective**

   Persona Prep is a cost-effective method for domestic undergraduates and fresh graduates to improve their interview and soft skills and to create competitive CVs which will help them to take the first step towards their aspired career destinations.

6. **Accessibility and 24/7 Availability**

   The Persona Prep platform can be accessed by undergraduates and fresh graduates from all academic and economic backgrounds without any constraints. Apart from the above, our users have the privilege of accessing our platform at any time making it convenient for the undergraduates amidst their busy academic schedules.

7. **Professional Competence and Continuous improvement**

   In Persona Prep, we focus on providing our users with resources, tools, and guidance which are continuously improved and are on par with current corporate trends and standards. This improvement and consistency are ensured through feedback obtained from corporate executives and consultants during regular time periods.

Application features and description

User Registration and Profile Management:

This feature provides a personalized experience to each of our users where they can register themselves by providing the necessary personal information. After logging in, they will be able to access their customized resumes which were constructed through our platform. Apart from the above, the users also have the ability to edit their personal information down the line.

Resume Builder Feature list

Resume Templates:

This feature provides our users with a variety of pre-built resume templates with multiple design choices to select from. This feature also enables the users to customize the relevant template in terms of fonts and colors. Each of these templates provided will be constructed in a way which is accepted as per corporate standards.

Pre-built Resume Sections:

Standard resume sections will be provided on the CV reducing the amount of design inconsistencies, this will include blocks such as contact information, summary, work experience, education, skills, and references which will be filled using our question-based system.

Role and skill analysis:

This features motive is to filter the most suitable set of skills that is required for the job they are applying for we do this by first gathering the hard skills, technical skills and then the soft skills and later go on to get the field or sector within the industry he/she is to go into and based on this sector selection information personalize and display only the necessary skills in the forwarded CV. An example to this is for a person applying for a Business Analyst role we would go on to add soft skills like Communication and Presentation, but to a person going into a Development role, we would rather rank his/her technical skills such as the programming languages he/she is familiar with.

What you see is what you get editor (WYSIWYG)

This feature enables the user to format certain content according to their preference.

Import and Export Options:

The Persona Prep platform provides users with the feature to import and export their relevant CVs in PDF which will increase the convenience of carrying them around when attending to physical corporate interviews as a soft copy or printed without any harm to the original design.

Auto-Save and Version Control:

The Persona Prep platform also provides the users with the feature to auto-save resume upon updating it, which will avoid any risks related to data loss. Furthermore, the platform also provides the option to version control that enables the user to get back to the previous versions of their respective resume.

Resume Preview:

This feature of our platform enables the user to have a preview of the resume which was constructed before finalizing it. This provides the freedom for the user to make any necessary changes to his/her resume before finalizing it.

Save and Download Options:

This feature allows the user to download the relevant resume in the form of a PDF document.

Sharing and Privacy Controls:

This feature of our platform enables the user to have the ability to generate links which are unique to view their respective resume. Furthermore, the privacy settings provided in our platform allow the users to control the level of accessibility of other users to their resumes.

Integration with social media:

This feature of our platform enables the user to share their CVs generated from Persona Prep to their LinkedIn accounts which will further increase the visibility and reach of their respective resume among potential employers.

Feedback and Reporting:

This feature of our platform enables the user to provide feedback regarding the guidance and resources provided from our end and apart from the above, they also can report any issues regarding our platform which will help eventually help us to maintain a bug-free system by correcting the issues mentioned. Additionally, the feedback received from users will help us to

maintain our platform consistently according to the current trends and standards of the corporate world, giving importance to professional competence and continuous improvement.

AI-powered Interview Simulator Feature list

AI-powered Interview Simulator and Transcript:

The AI-powered Interview Simulator provided by Persona Prep will provide realistic practice sessions for the users which will eventually help the users to refine their interview techniques and get a clear understanding of corporate interviews. Apart from the above, this will also boost confidence and reduce anxiety among the users regarding interviews. Additionally, users can also customize the mock interview scenario based on their respective academic backgrounds or based on the corporate industry that they target to get into. This feature of the platform will have an integration with the OpenAI API in order to provide a smooth experience for the users.

Additionally, the users will be provided with a transcript based on the conducted AI mock interview session which will enable the user to have a recall on the questions that he/she faced and the relevant answers provided during the session.

Practice Rounds:

This feature provides the user the ability to attempt the simulated interview questions more than one time and also the user can select different modes like easy, medium and hard. This also enables the user to recall, pause or to repeat a specific question as per their choice.

Interview Question Library:

In this feature of our platform, the users are provided with a customized interview question bank which consists of questions and answers from previously conducted best-simulated interviews based on the relevant corporate industry which they target. This will ensure that, apart from the oral simulated interviews that a user experienced personally, he/she is also getting used to interview questions that were faced by previous best-candidate users.

Back End Suite of tools for Career Guidance Unit

Resume Sorting Feature

Through this feature, the Persona Prep platform enables the career guidance unit to sort out all the users' CVs as per their academic backgrounds and their aspired career destinations. This will eventually help the development team to provide the right user's CVs to the related potential employer which will eventually increase the probability of users receiving an opportunity to a real interview in the corporate world.

Overall Skill Analysis Feature

This feature of the platform allows the development team to obtain and maintain a statistical sheet based on the users using the Persona Prep platform. This statistical sheet will contain analytical information regarding the potential amount of skilled undergraduates/graduates that are available for each different industries in the corporate workforce. This feature will eventually help the potential employers as well as the development team to match the demand and supply of vacancies in the corporate world in a sustainable manner.

Create and add new templates

This feature allows the development team to add, edit, or delete Resume templates to the Resume Bank of the Persona Prep platform. This feature ensures that the Resume templates that are provided by us, to the users are always on par with corporate trends and standards.
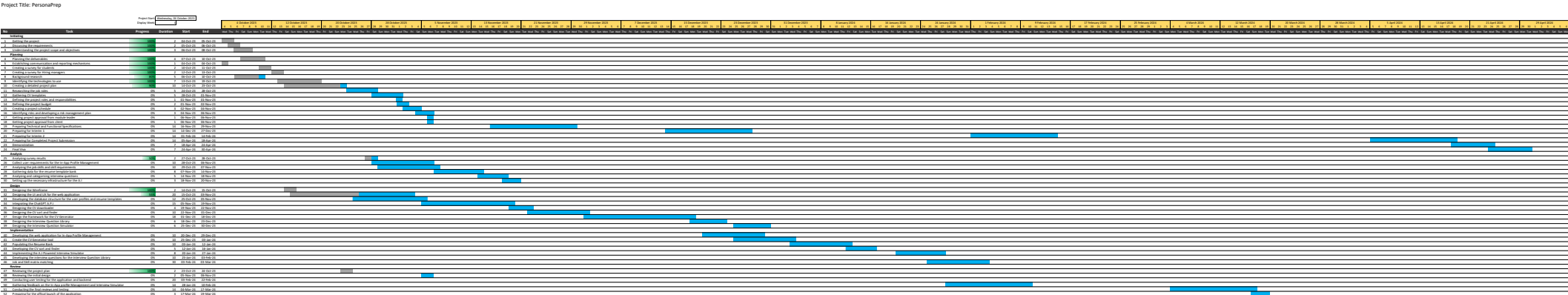
Feedback Analysis

Persona Prep platform allows the users to provide feedback regarding the resources or tools provided and also about any issues in the platform regarding technical or bug issues. This will help the development team to access the above feedback and make the relevant corrections to the platform which will ensure that the resources provided are on par with the corporate standards and this also ensures that the development team can perform bug fixes to provide a smooth experience to the users.

Update Interview Question Library

This feature of the Persona Prep platform ensures that the development team has access to the Interview Question Library, which contains the transcripts of the best AI-powered interviews done by our users. This feature allows the development team to add, edit, and delete this library in order to provide the new users with the latest best transcripts to train them for their real-life corporate interviews.

Time Plan (Gantt Chart)

- Link to the Gantt Chart: TimePlan.xlsx (https://nsbm365-my.sharepoint.com/:x:/g/personal/sbalasooriya_students_nsbm_ac_lk/EYQzgho-FdJlnMwdgCCBe1MBLnhE7ZTpFWZXdXsYLy1uxA?rtime=OLv-o__T20g)

Conclusion

In Conclusion, the platform Persona Prep is a valuable and feasible tool for individuals seeking to create professional and competitive resumes which will eventually help them reach their aspired career destinations. Persona Prep, with its user-friendly interface, vast resume template library, AI-powered Interview simulator and other intuitive features, is able to streamline the often hard, time-consuming process of creating a competitive corporate CV and the preparation towards the first step of their corporate career. Persona Prep empowers undergraduates and recent graduates to showcase their major skills on their CVs based on relevancy to their aspired career scope, which will ultimately increase their chances of securing their entry into the corporate world. Therefore, we understand that Persona Prep is the key to unlocking your new potential and opportunities and at the same time, making a lasting impression on your potential corporate employer.