Dear Intern

Interim project report is an inherent component of your internship. We are enclosing a reference table of content for the interim project report.

The key objective of this report is for you to capture how far you have got in completing the internship work against milestones expected to be achieved within a specific duration and seek the mentor’s feedback. Depending on the internship project and your progress (IT/Non-IT, Technical/Business Domain), you may choose to include or exclude or rename sections or leave some sections blank from the table of content mentioned below. You can also add additional sections. You can refer the project presentation to view the milestones related to your internship project. Please populate milestone# (1 / 2 / 3) and the milestone description in the interim project report based on the milestone for which you are submitting the interim project report.

You can refer the project presentation to view the milestones related to your internship project.

|  |  |
| --- | --- |
| Internship Project Title | Rio 210: Salary Prediction Dashboard for HRs |
| Name of the Company | TCS iON |
| Name of the Industry Mentor | Himdweep Walia |
| Name of the Institute | Amity University Online |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Start Date | End Date | | Total Effort (hrs.) | | Project Environment | Tools used |
| 15/10/2024 | 19/01/2025 | | 24.5 | | Jupyter Notebook | Python |
| Milestone #1 |  | Milestone: | | To create a dataset, clean the dataset and sanitize it. | | |

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**ACKNOWLEDGEMENTS**

I wish to express my heartfelt appreciation to my industry mentor, Himdweep Walia ma’am, for her invaluable guidance and unwavering support throughout this project. Her assistance and the opportunity she provided me to work on this remarkable platform have been indispensable in my successful completion of this endeavor. I am genuinely thankful for his willingness to address my queries at every stage of the project.

**OBJECTIVES**

The aim of this project is to develop a salary prediction dashboard specifically designed for human resource management entities. This dashboard will leverage the power of machine learning algorithms to forecast job candidates' salaries, taking into account various factors such as their experience, age, and qualifications. By providing this valuable information, the dashboard aims to assist HR managers in making more informed decisions during the candidate selection process and improve the overall effectiveness of hiring for job positions.

**INTRODUCTION**

The human resources department faces the complex task of evaluating job applicants and determining the best candidates for various positions. Salary considerations significantly influence a candidate's decision to accept a job offer, underscoring the importance of offering competitive compensation packages.

In this project, I collected the dataset, cleaned and sanitized it within the first five days. This dataset covers a wide range of job profiles and salary data, making it an invaluable resource for the HR entities.

**INTERNSHIP ACTIVITIES**

* + Watched the welcome kit videos.
  + Done preparations for RIO – pre-assessment.
  + Attempted the RIO – pre-assessment test.
  + Went through the day-wise plan.
  + Read the project reference material.
  + Read the industry project material.
  + Watched webinar 1.
  + Watched webinar 2.
  + Started with the Soft Skills course and completed the first two modules from it.
  + Gone through all posts in the digital discussion room.
  + Watched lectures and other videos to gain a better understanding of the topic.
  + Wrote activity reports to document my daily progress.
  + Verified that the data set was complete and accurate.
  + Read articles and learned how to clean and sanitize the data.
  + Watched the YouTube videos which were provided in the Reference Material section.

**APPROACH/ METHODOLOGY –**

To reach the first milestone of my internship project, I followed the following methodology that is summarized as follows:

1. **Familiarization:** I tried to understand the project objectives and its requirements after which, I immersed myself in the project's concepts and created a plan to execute the code with minimal errors. In this step, I involved a detailed reading of relevant articles to clear the basic concepts and started watching informative videos which helped me in understanding. This initial step allowed me to grasp the fundamental aspects of the project, that ensured a comprehensive understanding.
2. **Programming Environment:** I chose Jupyter Notebook as my programming environment for its numerous advantages. This decision was primarily driven by its efficiency in writing and executing code swiftly.
3. **Version Control:** Recognizing the importance of collaboration and code management, I established a GitHub account. This step facilitated seamless code sharing and provided a platform for version control. It also enabled efficient collaboration with peers and potential reviewers, ensuring that the project's codebase remained organized and accessible.

**OUTCOME**

After 1st milestone of this TCS-iON internship project I have learned how about regression models and I have also cleaned and sanitized the dataset. I have cleaned and removed two unnecessary columns capital-gain and capital-loss which are not needed in salary prediction. Additionally, I identified the "education-num" column as unnecessary and subsequently removed it from the dataset. These actions ensured that the dataset was streamlined, omitting irrelevant information and promoting data accuracy.

**LINK TO EXECUTABLE FILE**

**Google Colab File**

<https://colab.research.google.com/drive/17cplBHi5Z1b9KkkVSydFnciqBr1UEHMI>

**GitHub Repository Link**

[**https://github.com/KhushiUpadhye01/Salary-Prediction-Dashboard-for-HRs**](https://github.com/KhushiUpadhye01/Salary-Prediction-Dashboard-for-HRs)