

Project Design Phase-I
Proposed Solution Template

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID48457 |
| Project Name | Skill and Job Recommender Application |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

| S.No. | Parameter | Description |
|-------|--|---|
| 1. | Problem Statement (Problem to be solved) | To develop an end-to-end web application capable of displaying the current job openings based on the user skillset. |
| 2. | Idea / Solution description | In this paper, we proposed a framework for job recommendation task. This framework facilitates the understanding of job recommendation process as well as it allows the use of a variety of text processing and recommendation methods according to the preferences of the job recommender system designer. Moreover, we also contribute making publicly available a new dataset containing job seekers profiles and job vacancies. Future directions of our work will focus on performing a more exhaustive evaluation considering a greater amount of methods and data as well as a comprehensive evaluation of the impact of each professional skill of a job seeker on the received job recommendation. |
| 3. | Novelty / Uniqueness | With the development of information technology and application of the Internet, People gradually entered the time of information overload from information scarcity. User satisfaction with recommender systems is related not only to how accurately the system recommends but also to how much it supports the user's decision making. Novelty is one of the important metrics of customer satisfaction. There is an increasing realization in the Recommender Systems (RS) field that novelty is fundamental qualities of recommendation effectiveness and added-value. This paper combed research results about definition and algorithm of novel recommendation, and starting from the meaning of "novel", defined novelty of item in recommendation system. Experiment proved using the definition of novelty to recommend can effectively recognize the item that the user is familiar with and ensure certain accuracy. |

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| 4. | Social Impact / Customer Satisfaction | we develop several recommender systems and measure their ability to deliver accurate and diverse recommendations and their ability to generate customer satisfaction with diverse data sets. The results show that accuracy and diversity positively affect customer satisfaction when applying a deep learning-based recommender system. By contrast, only accuracy positively affects customer satisfaction when applying traditional recommender systems. These results imply that developers or managers of recommender systems need to identify factors that further improve customer satisfaction with the recommender system and promote the sustainable development of e-commerce. |
| 5. | Business Model (Revenue Model) | Recommendation systems allow brands to personalize the consumer experience and make suggestions for the information that make the most sense to them. A recommendation engine also lets businesses analyse the customer's current usage and past browsing history to deliver relevant service and product recommendations. |
| 6. | Scalability of the Solution | Recommendation system is a techniques, which provides users with information, which he/she may be interested in or accessed in past. Traditional recommender techniques such as content and collaborative filtering used in various applications such as education, social media, marketing, entertainment, e-governance and many more. |