**Notes on the Project Plan**

The purpose of the Project Plan is to define the tasks that need to be done for the project, identify who will be responsible for each task, and provide a date by which each task will be completed.

**Project Background:**

· A high-level description of the problem that the project will solve.

* **Internal migration in the United States is increasing day by day. Migration within the United States plays an important part in understanding population trends.This internal migration is the movement of households from one address to another address within the same town, county, state, or between states without leaving the country.**
* **Our team will be creating a model that will predict the internal migration for the future and our product is going to show previous migration trends.**

· Reference the Customer Requirements document for more information on the features to be implemented.

* **The plan is to select a database that is accurate and fulfill our requirements like state name/county name, count on inflow/outflow for each state/county. For this model we will be selecting databases from the last few years. After selecting the data we will need to remove unnecessary data and filter it through the software.**
* **We will be using a couple of software to visualize and analyze our datasets. The software that we are planning to work with are python, jupyter notebook and Tableau for now. (software requirements can increase with the progress of the project)**

**Statement of Work:**

· Describe all the work products that will be produced (e.g., specifications, test plans, code, defect reports, etc.) and a list of people who will perform that work.

* **We will be depending on the python, jupyter notebook and Tableau for our first phase of the project.**
* **With python we will be able to analyze our datasets well and python will help us to make a model from the datasets as well.**
* **Tableau is going to be one of the most important tools in our first phase of the project. By using Tableau, we will be able to visualize our selected datasets and we will be able to eliminate useless datasets from the visualization and we will be having our datasets cleaned after visualization.**
* **Finally, the Jupyter notebook will handle similar tasks as python and the Jupyter notebook will help us to create machine learning models after we process our database in python.**

**Resource List:**

· A resource list of all resources that will be needed for the product and their availability.



**Assumptions:**

· List any assumptions the stakeholders, the project team, and users have made.

* **As an assumption, we all have an idea of the product from our first phase and that is clean and accurate datasets for the second phase. Second phase will be on the visualization and model that will help us to predict the future migration. And the final phase will have a website connected with our Migration Model. We will be connecting the model and website to our network by using PHP so that we can save all the users' information.**

**Project Schedule:**

· Identify the list of all the tasks to be performed.

* **List :-**

1. **Analyze datasets in Python**
2. **Try to make a scratch of Migration Model in Jupyter notebook and Python.**
3. **Visualize the datasets in Tableau and eliminate unnecessary data.**
4. **Present the visualization to the stakeholder and professor.**
5. **Design the final Migration Model.**
6. **Create a website to connect with the Migration Model.**
7. **Connect front end with back end for user guide and Model’s storage cloud for users.**
8. **Perform the final test of “Migration Model”.**

· If a phased-release schedule will be required, discuss the various phases and expected deliverables for each.

* **For this term there will be 2 expected deliverables. First one will be the python analysis and another will be Tableau visualization.**

· Create a project schedule that shows the calendar time required for each task and who will be working on the task.

* **This week’s schedule**

| **Name** | **Tasks** | **Due Date/ Time** | **Status** |
| --- | --- | --- | --- |
| **Junaid Asim/ Devam Patel** | **Need to fill** | **10/11/2021,**  **11:00 PM** | **Completed** |
| **Ayaz Rathod/ Sneh Patel** | **Create a webpage for the project and provide collect requirements for the web page** | **10/11/2021,**  **11:00 PM** | **Completed** |
| **Parth Patel/ SM Pantho** | **Create a Preliminary Project Plan and Analyze phases and challenges.** | **10/11/2021,**  **11:00 PM** | **Completed** |

**Risks:**

· Identify any risks that might be encountered and indicate how those risks might be handled, should they occur. Include external factors.

* **One of the risks that we all are expecting is to create a scratch model from the datasets. It will occur for sure as we are depending on python for our Migration Model. Since none of us have worked with prediction models yet. To handle these risks we will be getting help from our stakeholder as he has some knowledge in the field of python.**
* **Another risk is to put our datasets in Tableau and wait for the result. We are sure that we have to work on that to visualize the datasets properly and eliminate unnecessary datasets. The result should be a clear map/graph with the labels of migrations and counts on those migrations.**