Aum Amriteswaryai Namaha

AMRITA VISHWA VIDYAPEETHAM | AHEAD Online

# Minor Project 21CSA697A

## Project Proposal (Coursera Mode)

**Title: Project Proposal**
**Student Name: Abir Yusuf Sait**
**Roll No.: AA.SC.P2MCA2207108**

| Sl. No | Courses Selected | Link | Duration of the videos |
|---|---|---|---|
| 1. | Python for Data Science, AI & Development | https://www.coursera.org/learn/python-for-applied-data-science-ai?specialization=ibm-data-engineer | 25 hours |
| 2. | Create Interactive Dashboards with Streamlit and Python | https://www.coursera.org/projects/interactive-dashboards-streamlit-python | 2 hours |
| | | Total Duration: | 27 hours |

**Main Objective/Deliverable:**

- Describe Python Basics including Data Types, Expressions, Variables, and Data Structures.
- Apply Python programming logic using Branching, Loops, Functions, Objects & Classes.

- Demonstrate proficiency in using Python libraries such as Pandas, Numpy, and Beautiful Soup.
- Access web data using APIs and web scraping from Python in Jupyter Notebooks.
- Build interactive data visualizations with Streamlit, Python, Pandas, and Plotly.

**Timeline and Milestones:**

**(*may include course enrolment, phases of project planning to do... etc)***

| | **Milestones** | **Timeline** |
|---|---|---|
| **1.** | Enroll in Python for Applied Data Science and AI course. Review syllabus and identify relevant sections. | (12 Nov – 18 Nov) |
| **2.** | Complete Python for Applied Data Science and AI course. | (12 Nov – 16 Dec) |
| **3.** | Enroll in Interactive Dashboards and Streamlit for Python course. Define the project goals, identify the data sources, and outline the methodology. | (17 Dec - 23 Dec) |
| **4.** | design and develop interactive dashboards and visualizations using Python and Streamlit. | (17 Dec – 13 Jan) |
| **5.** | Evaluate the dashboards and visualizations, make necessary improvements | (14 Jan – 20 Jan) |
| **6.** | Write a report documenting the project methodology, findings, and conclusions, and submit the report and the dashboards and visualizations | (21 Jan – 28 Jan) |

**Tools to be used for the project**

| **Software Tools** | **Specifications** |
|---|---|
| Python | Programming language |
| Jupyter Notebooks | IDE |
| NumPy, Pandas, Streamlit | Libraries |

**Learning involved:**

| Topic | Description |
|---|---|
| Python Programming: | Learn the fundamentals of the Python programming language, including syntax, data structures, and control flow. |
| Data Science Libraries: | Explore essential libraries like NumPy and Pandas for data manipulation and analysis. |
| Jupyter Notebooks: | Understand how to work with Jupyter Notebooks for interactive coding and documentation. |
| Data Visualization with Streamlit: | Explore how to integrate data visualizations into Streamlit applications to convey insights effectively. |
| Plotly Python: | Create interactive plots with Plotly Python |

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| **Date 12 – Nov - 2023** |
| **Student Name and Signature : Abir Sait**  |