Deliverable0

▼ Project Focus/Overall Goal:

The New Commonwealth Fund (NCF) aims to better understand the educational divide in computer science education and AP test participation among Black, LatinX, and indigenous students in Massachusetts school districts. The project's primary goal is to identify demographic disparities in computer science education and AP test-taking across different school districts, taking into account factors such as race, ethnicity, gender, school type, geography, age, and other relevant variables. The ultimate objective is to provide insights and recommendations that will guide NCF in focusing their investments and partnerships to address these disparities and promote racial equity in computer science education.

▼ Why is This Project Important?

1. **Racial Equity and Social Justice:** Promoting racial equity in education is a crucial aspect of achieving broader social justice goals. Computer science skills are becoming increasingly vital in the modern workforce, and ensuring that underrepresented minority groups have access to quality education in this field is essential for reducing disparities and systemic biases.
2. **Technological Integration:** As technology continues to shape various aspects of society, understanding and addressing disparities in computer science education are essential for creating a more just and inclusive technological landscape. This project aligns with NCF's commitment to fostering an ecosystem that supports racial equity and social justice outcomes.
3. **Informed Decision-Making:** By collecting and analyzing data at the school district level, NCF can make informed decisions on where to focus their investments and which organizations or corporations to partner with. This project provides a data-driven approach to addressing educational disparities.

▼ What Type of Data Will You Collect or Be Analyzing?

1. **Computer Science Course Data:** Information about the availability of computer science courses in different school districts, including course offerings, enrollment numbers, and curriculum details.

2. **AP Test Participation Data:** Data on the number of students from underrepresented minority groups (Black, LatinX, indigenous) taking AP computer science tests in various districts.
3. **Demographic Data:** Demographic information such as race, ethnicity, gender, age, and school year for students in the studied districts.
4. **Geographic Data:** Location data for school districts to analyze regional disparities.
5. **School Type Data:** Categorization of schools (e.g., public, private, charter) to assess differences between them.

▼ Potential Limitations of the Project:

1. **Data Availability:** Availability and accuracy of data may vary across districts, and some data may not be readily accessible. Efforts should be made to gather the most comprehensive dataset possible.
2. **Data Privacy:** Ensuring that data collection and analysis comply with privacy regulations and protect individual student privacy is critical.
3. **Time and Resources:** Data collection and analysis can be time-consuming and resource-intensive, and the project should allocate resources accordingly.

▼ Next Steps and Task Division:

1. **Data Collection:** Assign team members to gather relevant data from sources such as educational institutions, government agencies, and existing datasets.
2. **Data Cleaning and Preparation:** Ensure that collected data is clean, consistent, and ready for analysis. Address any missing or erroneous data.
3. **Data Analysis:** Analyze the data using appropriate statistical and data visualization techniques to identify disparities by demographics, geography, and other relevant factors.
4. **Report Generation:** Create a comprehensive report or interactive experience that presents the findings, including visualizations, insights, and recommendations.