

Milestone 2

- What tools will you use?
 - **Frontend Development:** HTML, CSS, Javascript
 - **ML:** Jupyter Notebook (Python), Libraries and Frameworks(NumPy, Pandas, Scikit-learn, etc), Github
 - **Data visualization:** Plotly, Matplotlib
- What do you need to learn or get more familiar with in order to execute your project?
 - We are going to need to familiarize ourselves with frontend/backend development
 - Research more about frameworks such as Scikit-learn and TensorFlow
 - Research different machine learning models/algorithms
 - Research and identify best evaluation metric (accuracy, precision, recall)
 - Research techniques for cleaning and preparing the data
 - Learn about handling missing values, outliers, and normalization
 - Better understand feature engineering
 - Learn about overfitting/underfitting
 - Research best data visualization methods for our project
- How do you plan on learning what's needed in order to execute your project?
 - Research needed topics through google, youtube, etc.
 - Revisit old lectures/projects to refresh memory
 - Get input/feedback from teammates and others
 - Look up documentation for libraries and frameworks

Possible Datasets:

Here are some of the datasets we are considering on using:

1. National Health and Nutrition Examination Survey (NHANES)
 - Source: Centers for Disease Control and Prevention (CDC)
 - Details: NHANES provides extensive data on health and nutritional status, including diabetes prevalence, with breakdowns by ethnicity, including Latino/Hispanic populations.
 - Link: [NHANES](<https://www.cdc.gov/nchs/nhanes/index.htm>)
2. Hispanic Community Health Study / Study of Latinos (HCHS/SOL)--
 - Source: National Institutes of Health (NIH)
 - Details: A comprehensive study specifically focused on health issues, including Type 2 diabetes, within the Latino/Hispanic population in the U.S.
 - Link: [HCHS/SOL](<https://sites.csc.unc.edu/hchs/>)
3. Behavioral Risk Factor Surveillance System (BRFSS)--
 - Source: CDC
 - Details: The BRFSS collects data on health-related risk behaviors, including diabetes rates, and provides breakdowns by ethnicity, including Hispanics/Latinos.
 - Link: [BRFSS](<https://www.cdc.gov/brfss/>)

4. American Diabetes Association (ADA) - Statistics & Data--

- Source: ADA

- Details: ADA compiles research and statistics about diabetes, including ethnic-specific prevalence for Hispanic/Latino populations.

- Link: [ADA Diabetes

Statistics](<https://www.diabetes.org/resources/statistics/statistics-about-diabetes>)

5. National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) - Data & Statistics--

- Source: NIH/NIDDK

- Details: Provides data related to Type 2 diabetes prevalence, with demographic data including ethnicity (Latino/Hispanic populations).

- Link:

[NIDDK](<https://www.niddk.nih.gov/health-information/health-statistics/diabetes-statistics>)

[Diabetes and Hispanic Americans](#) External link from the HHS Office of Minority Health provides prevalence data on diabetes among Hispanic Americans, including death rates, risk factors, and links to more information.

<https://blast.ncbi.nlm.nih.gov/Blast.cgi>

Example of website:

