**Data Harmonizing Scripts Goals**

**1. Create a standardized taxonomic harmonization script**

- Develop a function to standardize species names across multiple datasets

- Implement synonym matching for common taxonomic discrepancies

- Add validation checks for taxonomic consistency

**2. Develop a spatial data harmonization workflow**

- Write scripts to convert between different coordinate systems

- Create functions to standardize geographic granularity across datasets

- Implement quality control checks for coordinate accuracy

**3. Temporal data standardization**

- Build a script to convert various date formats to a single consistent format

- Develop aggregation functions to harmonize different temporal resolutions

- Add validation for temporal outliers and impossible dates

**4. Missing data handling protocol**

- Implement consistent missing data codes across datasets

- Create documentation of missing data patterns

- Develop imputation functions where appropriate

I plan to focus on making my code modular and well-documented, following the advice about "making life easier for future me." I'll push all scripts to GitHub by the due date, along with example datasets demonstrating their functionality and README documentation explaining usage.

Each script will include quality control steps as outlined in the document, particularly focusing on taxonomic classifications, missing data, outliers, geographic coordinates, and date formatting.