

Project Development Guidelines for AI

This document is intended as a point of reference for review during the entire project. See also Stanford Libraries AI Guiding Values.

Define the project

What is the goal? Is there more than one way to get there?

How, exactly, will AI be applied to this problem?

Who is the audience for the project? How do the outcomes relate to the audience?

Can you break the problem down into discrete tasks? What is the scope? What is in, what is out?

Consider starting small and building on successes.

Assemble the project team and inventory resources

How much time do you have to complete the project? Can the project be done incrementally?

What competencies do you have represented in your team and which ones require training? What is your plan for additional skill building?

Defining the team and roles is a great window into the project structure. Some of the roles to consider: Conceptualization, Methodology, Implementation, Reproducibility, Interpretation, Use Analysis, Data Curation, Annotation, Reporting, and Project Management

Gather and prepare the content

Garbage in, garbage out still applies.

Do you have permission to use the data in the necessary format?

Map out the steps of data cleaning and data preparation with team members who know the content.

Consider the implications of the data you are using as well as the data that was used to train any model you might be using.

Survey methods

Are there existing projects similar to this one? How are they different?

Is there existing research that describes applications of the techniques you plan to use?

Define success

How will you know when you are done? What are the milestones?

How will you know when it is time to pivot?

Have you carefully considered the risks from multiple points of view in the library?

Demonstration and documentation

Work iteratively, in an interactive loop of coding and viewing results in the web app (e.g Streamlit) so the whole team can participate.

Document your work for the sake of transparency, preservation, and contributing to the community knowledge base using platforms that support collaboration, documentation and reuse like python notebooks.

Make writing documentation collaborative. Things that are obvious to some will be unclear to others.