

# Project Overview

**Estimated duration:** 2 minutes

The final project of this course encourages you to use the tools and concepts you've learned so far. As you complete the project, you will need to upload screenshots of your responses to verify what you have done so that they can be graded in the peer-graded assignment.

## Project overview: Build a QA Bot Web App

The project "Build an QA Bot Web App" is designed to integrate and implement the key concepts and tools you have learned in this course.

It simulates a real-world scenario where you are required to build a bot that will leverage LangChain and a large language model (LLM) to answer questions based on content from loaded PDF documents.

The project involves several key components and techniques including:

1. Document loading using document loaders
2. Splitting long documents using text splitters
3. Generating embeddings using embedding models
4. Storing embeddings using vector databases
5. Defining retrievers
6. Setting up Gradio as the front-end interface

Using these elements, you will build a fully functional question-answering (QA) system. By leveraging LangChain and an LLM, the bot will be able to read and understand the content of loaded PDF documents and provide accurate and relevant answers to user queries.

Through this project, you will gain hands-on experience in building an AI application using RAG and LangChain.