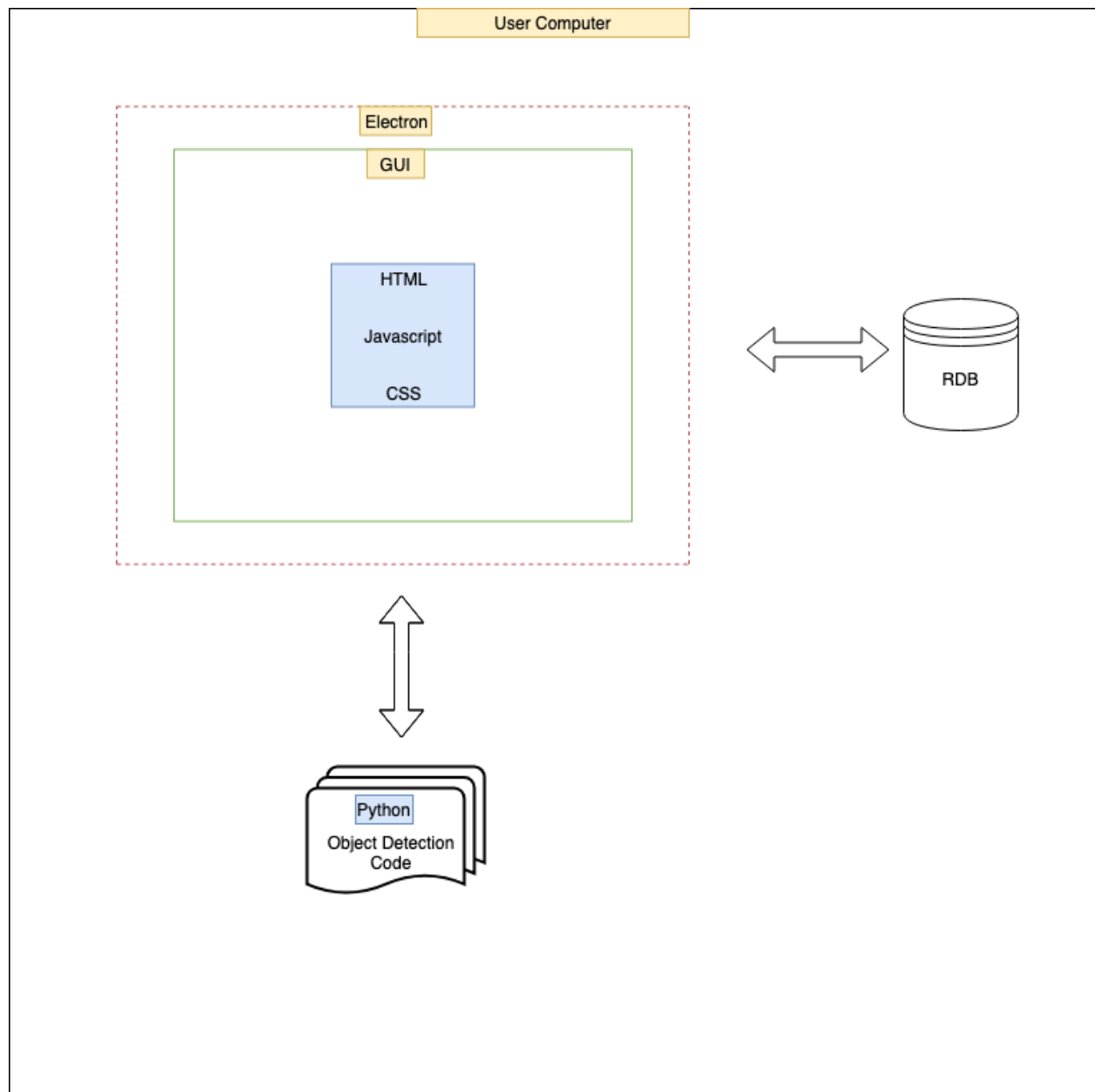




The architecture for this project is quite simple. We will be using Electron, a popular Javascript framework, that allows us to build a cross-platform desktop application with a single codebase using basic Javascript/HTML/CSS + some Electron wrapper code to tie it all together. The GUI will need to be able to talk to two different components, a relational database and the Object Detection code. We have not decided on exactly what relational database we want to use but we can use any lightweight DB that runs on the user's computer like Postgres, sqlite3, or MongoDB. The Database will house the object library with the preset objects that we want to provide to users and potentially store checkpoints and output from the Object Detection code to allow for persistent storage even after the application is closed. The Object Detection code is

code that will be provided from the client and will be called from our Electron applet. This is the main engine that the GUI is being built around and will be packaged with the Electron applet.