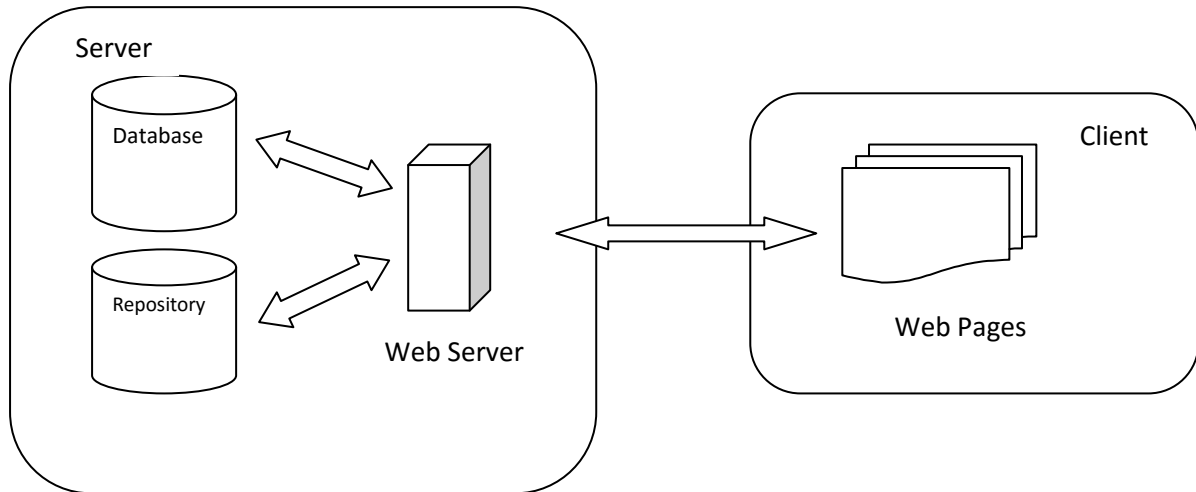**All questions of this test are related with the computer system of a Digital Library. The system is in charge of stock, organize and select all the information of the digital books (there are 3 kinds of extension .epub, .pdf, .txt). Also, the system allows you to search and download books. The basic diagram of the computer system is:**

1. Design a basic User Interface of the Web Page to display and manage available books of the digital library.
2. Create Database structure to organize the digital library.
3. In order to search a book using web engine, is needed to design an algorithm in the backend of the web page to find the most suitable book for the user. Basically, the algorithm should take into account user filters (type, category) with logical conditions for each ones. Imagine you have this user interface:

   a. Create the algorithm of the backend process when search button is pressed.
   b. Which is the most suitable data structure to display the result of the search? Why? Give an example with dummy data.
4. Propose a technology to develop this computer system. Why?