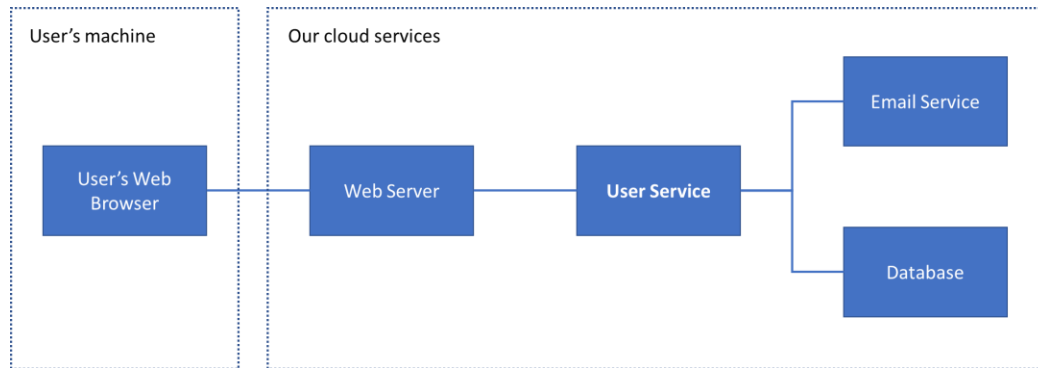Design a "User Service" microservice that allows customers to sign up for new user accounts. The requirements for the sign-up flow are:

- An email address and password are required to create a new user account
- We must verify the customer's email address **before** asking them for a password

You can assume the existence of the following components:

The Web Server serves web pages to the customer's web browser. It can serve the following pages and any other pages that you need for the sign-up flow:

When the customer clicks a button on a page, the Web Server will make a request to an endpoint on the User Service. You can specify which endpoint on the User Service the Web Server will call, what data should be included in the request, and what the Web Server should do when it receives the response (e.g. which page it should return to the web browser). You don't need to specify any implementation details for the Web Server.

The Email Service is a microservice that the User Service can use to send an email to an email address. The Database can be used by the User Service to store and retrieve persistent data.

The User Service is the microservice you must design, in particular:

- What HTTP endpoints does it expose?
- What does each endpoint do?
- What request data does each endpoint take?
- What response data does each endpoint produce?
- What data does the service store in the database?