

Service Layer Design

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SWDV-691: Capstone Design

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For my PC Building Advisor web application, the service endpoints that will be included in the minimal viable product is the /home, /howtouse, and /contactus.

/howtouse Endpoint

The /howtouse endpoint will be where users would find information on how to use the application. For this endpoint, there would only be a GET request to display the information in the presentation layer for the user. In response to the GET request, the application should receive the 200 OK HTTP status code, indicating that the data was retrieved successfully. If the end-user has no internet connection the application should receive the 404 Not Found HTTP status code.

/contactus Endpoint

The /contactus endpoint will be where users can find the developer's contact information and also send requests to update the database. For example, if the user has a CPU not included in the database, they could send the details of the CPU to the developer for review to add to the official CPU database. This example would use a POST request to send data to a recommendations database. In response to the POST request, the application should receive the 200 OK HTTP status code, indicating that the data was transmitted successfully. If the end-user attempts to send a message with an empty payload, the application should still receive the 200 OK status code but should display to the user that no message was input.

/home Endpoint

The /home endpoint will be where users interact with dropdowns to select computer components and press the Analyze button to receive a response on whether their PC build selection is compatible or not. To avoid any database corruption, this endpoint will not allow any PUT, POST, or DELETE requests. However, this endpoint would use a GET request for obtaining data for the selected components and obtaining the resulting analysis after the Analyze button is pressed. The application should receive the 200 OK HTTP status code in response to the GET request. If the end-user has no internet connection the application should receive the 404 Not Found HTTP status code. Any other unexpected errors would fall

under the 500 Internal Server Error HTTP status code. If the user does not select anything from the dropdown, the application would return an error message stating this. See below for a diagram depicting the intended service layer design.

