# API Endpoints for PC Build Wizard

## 1. Components API

- GET /components: Fetch all components from the database.  
- GET /components/search: Search components based on filters (e.g., type, price).  
- POST /components: Add a new component to the database.  
- PUT /components/:id: Update an existing component by its ID.  
- DELETE /components/:id: Delete a component by its ID.

## 2. Session Builds API

- GET /session-builds/:sessionId: Retrieve a specific session build by its ID.  
- POST /session-builds: Create or update a session build.  
- DELETE /session-builds/:sessionId: Delete a specific session build by its ID.  
- POST /session-builds/validate: Validate the compatibility of a session build.

## 3. Cached Queries API

- GET /cached-queries/:queryId: Retrieve a specific cached query by its ID.  
- POST /cached-queries: Add a new cached query to the database.

## 4. PCPartPicker Integration API

- GET /pcpartpicker/fetch: Fetch data from the PCPartPicker API and store it in the database.  
- GET /pcpartpicker/update: Refresh existing PCPartPicker data in the database.

## 5. ChatGPT Integration API

- POST /automatic-build: Generate a PC build based on user preferences.  
- POST /automatic-build/modify: Modify an existing AI-generated build.

## 6. Compatibility Validation API

- POST /builds/validate: Validate the compatibility of a given PC build.

## 7. User Preferences API (Optional)

- GET /preferences: Retrieve user preferences.  
- POST /preferences: Save user preferences.

### ****Additional Features for Optimization****

#### ****Search and Filtering****

* **Endpoint**: /components/search
* **Description**: Allows users to filter components by type, brand, price, etc.
* **Query Parameters**:
  + type (e.g., "CPU", "GPU").
  + price\_min and price\_max.
  + brand.

#### ****Pagination****

* **Endpoint**: Add pagination to list endpoints like /components.
* **Query Parameters**:
  + page: Current page number.
  + limit: Number of items per page.