API Endpoints Documentation

1. **Homepage**

   - **URL**: `http://127.0.0.1:5000/`

   - **Method**: `GET`

   - **Description**: Renders the `index.html` template.

   - **Response**: Renders an HTML page (no JSON output).

2. **Get All Data**

   - **URL**: `http://127.0.0.1:5000/getAllData`

   - **Method**: `GET`

   - **Description**: Fetches all `Person` records from the database.

   - **Sample Response (if data is found)**:

   ```json
   [
     {
       "id": 1,
       "name": "Luke Skywalker",
       "height": "172",
       "mass": "77",
       "hairColor": "blond",
       "skinColor": "fair",
       "eyeColor": "blue",
       "birthYear": "19BBY",
       "gender": "male"
     },
     {
       "id": 2,
       "name": "Leia Organa",
       "height": "150",
       "mass": "49",
       "hairColor": "brown",
       "skinColor": "light",
       "eyeColor": "brown",
       "birthYear": "19BBY",
   ```

```json
      "gender": "female"
    }
  ]
```

- **Sample Response (if no data is found)**:

```json
{
  "message": "No data found!"
}
```

3. **Fetch Data from External API and Save to Database**

   - **URL**: `http://127.0.0.1:5000/fetchData`

   - **Method**: `GET`

   - **Description**: Fetches Star Wars characters from the Star Wars API and stores them in the database.

   - **Sample Response (on successful fetch and save)**:

```json
{
  "message": "Data fetched and saved successfully!"
}
```

   - **Sample Response (on error)**:

```json
{
  "error": "Error message here"
}
```

4. **Edit Data by ID**

   - **URL**: `http://127.0.0.1:5000/editData/<id>`
     Replace `<id>` with the ID of the `Person` to update (e.g., 1).

   - **Method**: `PUT`

   - **Description**: Updates details of a `Person` record with the specified ID.

   - **Request Payload**:

```json
{
    "name": "Updated Name",
    "height": "180",
    "mass": "80"
}
```

- **Sample Response (on successful update):**

```json
{
    "message": "Person data updated successfully!"
}
```

- **Sample Response (if person not found):**

```json
{
    "message": "Person not found!"
}
```

5. **Get Data by ID**

   - **URL**: `http://127.0.0.1:5000/getData/<id>`
     Replace `<id>` with the ID of the `Person` to retrieve (e.g., 1).

   - **Method**: `GET`

   - **Description**: Retrieves details of a `Person` record by ID.

   - **Sample Response (if person is found):**

```json
{
    "id": 1,
    "name": "Luke Skywalker",
    "height": "172",
    "mass": "77",
    "hairColor": "blond",
    "skinColor": "fair",
    "eyeColor": "blue",
```

```json
    "birthYear": "19BBY",
    "gender": "male"
  }
```

- **Sample Response (if person not found):**

```json
{
  "message": "Person not found!"
}
```

6. **Delete Data by ID**

   - **URL:** `http://127.0.0.1:5000/deleteData/<id>`
     Replace `<id>` with the ID of the `Person` to delete (e.g., 1).

   - **Method:** `DELETE`

   - **Description:** Deletes a `Person` record by ID.

   - **Sample Response (on successful deletion):**

```json
{
  "message": "Person deleted successfully!"
}
```

   - **Sample Response (if person not found):**

```json
{
  "message": "Person not found!"
}
```

Additional Notes

- **Error Handling:** If any exceptions occur during endpoint execution, the response will include the error message in JSON format:

```json
```

```
{
  "error": "Detailed error message"
}
```

- **Starting the Application**: Run the app using:

```bash
python app.py
```

Access it at `http://127.0.0.1:5000/`.