

Ryan Kebe

Module 3 Summary

This week, I expanded my web development skills by building a dynamic, interactive web application using PHP, PostgreSQL, and HTML. I started by setting up a local development environment, where I learned to enable PostgreSQL extensions in PHP to ensure the database connection worked smoothly. With PostgreSQL installed and configured, I created a database to hold the Pittsburgh Steelers' active roster and learned to populate it with data using SQL INSERT statements.

One of the key features I implemented was displaying the roster data in an HTML table, essentially creating a GridView for easy viewing and interaction. I added sorting functionality to allow users to click on column headers and toggle between ascending and descending order for attributes like **jersey number** and **position**. For the **position** column, I further customized the sort order to display players by role, starting with quarterbacks (QB), followed by running backs (RB), wide receivers (WR), and so on, rather than alphabetically. I also implemented pagination, displaying a limited number of players per page, with navigation links to move between pages.

Another important aspect I learned was updating database records dynamically through PHP. For example, I used SQL UPDATE commands to adjust player positions as needed, directly modifying data in the database after I made some typos. This project gave me hands-on experience with PHP and SQL integration, GridView functionality, and effective database management techniques. These skills significantly strengthened my understanding of backend development and creating user-friendly data displays in web applications.