

Progress report 03

Name: Hao SUO

Student id: 300392463

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Work log

Date	Number of Hours	Description of work done
Sep 07, 2025	1.5	Reviewed the document General Guidelines and Deliverables provided by the instructor
Sep 08, 2025	3	Reading the A Guide to Technical Report Writing to be familiar with the rules
Sep 08, 2025	2	Drafted the proposal for my part of the project, which focuses on the development of the website portal for displaying and analyzing game data
Sep 09, 2025	3	Worked on project planning and created the Gantt chart for the website portal tasks using Tableau. Updated the proposal with the timeline section.
Sep 11, 2025	6	Compared several data visualization libraries such as Highcharts, Plotly, D3.js and Chart.js. I tested basic charts in each library to see how they work with PHP/MySQL. Highcharts and Plotly had many advanced features but needed paid licenses or extra setup for some functions. D3.js was powerful but very hard to learn and required a lot of custom coding. Chart.js was easier to use, had clear documentation, and worked smoothly with PHP and MySQL. Because of this I finally chose Chart.js for our project.
Sep 12, 2025	2.5	Revised the project proposal based on instructor's feedback, including unifying the narrative perspective, adding detailed deliverables, and correcting tense and grammar issues in the report.
Sep 13, 2025	3	Discussed data structure issues with teammates, finalized basic tables and related columns, and aligned on game mechanics and design approach.
Sep 15, 2025	4	Researched server options for handling game data uploads; compared multiple online server

		providers but have not finalized the choice yet.
Sep 18, 2025	4	Set up the basic environment with PHP and MySQL database; used local resources temporarily since the server has not been finalized.
Sep 20, 2025	1	Revised the project proposal again, reorganized the Deliverables section for clarity and detail.
Sep 22, 2025	3	Discussed data structure with teammates, confirmed the columns of the match table, and analyzed how the portal should retrieve data and the basic API design.
Sep 25, 2025	2	Revised GitHub repository settings based on instructor's requirements; renamed repository and updated README.md file accordingly.
Report2		
Sep 27, 2025	3.5	Finished choosing the server and decided to use Google Cloud. Created a new VM and set up PHP, Apache, and MySQL on it.
Sep 29, 2025	4	Installed the needed PHP extensions. Tested the connection between Apache and MySQL, and made sure PHP pages can get and show data from the database.
Oct 1, 2025	3.5	Built the static HTML/CSS structure of the portal as a test and prototype, including homepage layout, navigation bar, and chart area. Uploaded the static version to GitHub
Oct 2, 2025	2	Discussed game data, table design, and website functions with teammates. Some planned functions are not supported by the game yet, so they are left empty for now.
Oct 3, 2025	4.5	implemented PHP backend functions to connect to MySQL. Designed page logic and tested data reading and display successfully.
Oct 6, 2025	4	Developed RESTful API for CRUD operations. Tested the API with Postman locally and on the cloud server. Uploaded the world-balance-api project to GitHub.
Oct 8, 2025	3.5	Deployed the full portal website on the cloud server. Tested the connection between front-end and back-end. Started adding sample data into the database for testing (still in progress).
Report3		
Oct 10, 2025	3.5	Started research on Chart.js basic usage.

		Learned how to draw bar and line charts using sample data. Practice a simple HTML + JS page and upload the github
Oct 12, 2025	4	Integrated Chart.js with PHP + MySQL. Built API to send json data to the chart. Tested fetching data from the database and showing
Oct 13, 2025	3	Wrote the Applied Research Report: Using Chart.js for Data Visualization in a PHP + MySQL Web Portal.
Oct 15, 2025	4.5	Continued the second research about Chart.js interaction. Learned to use events like onClick and onHover. Tested changing datasets by button click and chart.update(). (not complete)
Oct 17, 2025	4	Applied the interaction functions to the Players page. When selecting different players, all charts update automatically. Adjusted chart colors
Oct 19, 2025	3.5	Finished the main layout and data display for the Vehicles page. Added filters for nation and tank type, and a search box for vehicle name.
Oct 21, 2025	2	Improved both Players and Vehicles pages. Added third chart "Top 10 Players by Win Rate" with horizontal bars. Verified all charts refresh when player changes

Description of work done

During this reporting time, I mainly worked on data visualization and front-end part of the portal website.

I finished two small research works about Chart.js. The first one was called “Applied Research Report Using Chart.js.” It shows how to use Chart.js together with PHP and MySQL to make dynamic charts.

The second research was about Chart.js interaction, like using onClick and onHover, switching datasets, and updating the chart. This part is not fully done yet.

After the research, I used what I learned in the portal.

I made three interactive charts for the Players page: one K/D trend chart, one win rate by vehicle type chart, and one “Top 10 Players by Win Rate” bar chart.

These charts connect to the backend API. When a user chooses a different player, all charts change and show new data.

I also worked on the Vehicles page. This page shows a table for all vehicles and can filter by nation or vehicle type.

It also connects with the database by PHP API and can read, filter, and show the data correctly.

Repo Check-in of Implementation completed

In this phase, I added several new folders to the Implementation section in GitHub.

In the Documents section, I added the file “Applied Research Report Using Chart.js.pdf.” This report mainly explains the basic usage of Chart.js and how to get data from the backend API.

In the Implementation section, I uploaded two new folders under /portal/chart_test and chart_interaction.

The chart_test folder contains the files used for my first research about how to create and display charts with real database data.

The chart_interaction folder includes the source code for my second research on Chart.js interaction features.

This part is still in progress, so I only uploaded the code files and not the written report yet.

I also updated two main PHP files in the portalDemo folder — player.php and vehicles.php.

These files now include new Chart.js visualizations and improved connections to the backend API for dynamic data display.

The files/folders I have checked in the repo are as follows:

- Documents/Applied Research Report Using Chart.js.pdf
- Implementation/portal/chart_interaction/*
- Implementation/portal/chart_test/*
- Implementation/portal/portalDemo/*

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Documents

Implementation

DataAnalysisPrograms

GameTestVideo

WorldRebalance

portal

chart_interaction

app.js

app1.js

getVehicles.php

index1.html

jamnorip

Add files via upload

6ad4478 last week History

Name	Last commit message	Last commit date
..		
app.js	Add files via upload	last week
app1.js	Add files via upload	last week
getVehicles.php	Add files via upload	last week
index1.html	Add files via upload	last week
indexxxxxx.html	Add files via upload	last week
style.css	Add files via upload	last week

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Name	Last commit message	Last commit date
..		
app.js	Add files via upload	last week
app1.js	Add files via upload	last week
getVehicles.php	Add files via upload	last week
index1.html	Add files via upload	last week
indexxxxxx.html	Add files via upload	last week
style.css	Add files via upload	last week

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portal

chart_interaction

app.js

app1.js

getVehicles.php

index1.html

indexxxxxx.html

style.css

chart_test

portalDemo

assets

includes

Name	Last commit message	Last commit date
..		
assets	Add files via upload	4 hours ago
includes	Add files via upload	4 hours ago
about.php	Add files via upload	4 hours ago
getPlayerTrend.php	Add files via upload	4 hours ago
getWinRate.php	Add files via upload	4 hours ago
index.php	Add files via upload	4 hours ago
players.php	Add files via upload	4 hours ago
searchRedirect.php	Add files via upload	4 hours ago
squad_ranks.php	Add files via upload	4 hours ago
vehicles.php	Add files via upload	4 hours ago
vehicles_search.php	Add files via upload	4 hours ago