Progress report 02

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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).

Description of work done

During this reporting period, I set up the server environment, developed the portal website, and deployed it to the cloud.
I created a new virtual machine on Google Cloud and installed PHP, Apache, and MySQL. After that I built a static HTML/CSS prototype of the portal and discussed with my teammates which data and functions can be supported by the game. I uploaded this prototype to GitHub. After that, I developed the PHP backend and created RESTful APIs that support create, read, update, and delete (CRUD) operations. I tested these APIs with Postman on both my local computer and the cloud server, and they worked well. Finally, I changed the static pages to dynamic PHP pages that can read and write data through the APIs. I am now testing with sample data to make sure the PHP pages can display the data correctly.

Repo Check-in of Implementation completed

In this phase, I added several new folders to the Implementation section in GitHub.
The portalDemo_static_old folder keeps my early version of the portal, which was only built with simple HTML and CSS.
The portalDemo folder now includes the PHP version that connects to the MySQL database and lets the pages show and switch data properly.
The world-balance-api folder has the PHP files for the RESTful API, which I use to create, read, update, and delete records.
So far, I have tested all of these locally, and the portal can already get and display data from the database through the API. I'm now using some sample data for testing.
In the next step, I plan to connect the portal with real game data and use Chart.js to make the charts more visual and interactive.

The files/folders I have checked in the repo are as follows:
- Documents/Proposal_Hsu463_Report2.docx
- Implementation/portal/portalDemo_static_old
- Implementation/portal/portalDemo
- Implementation/portal/world-balance-api