ProBattle 2025

Web Development Guidelines

February 10, 2025

Competition Overview

Welcome to the **Web Development Competition at ProBattle, IBA**! In this **24 hour challenge**, you will develop a web application based on a given theme. The competition will test your **technical skills, creativity, and problem solving abilities**. Get ready to **code, collaborate, and compete**!

Competition Theme

Your task is to develop a web application that allows users to create, manage, and share **collections of their work**. These collections can be **public** or **private** based on user preference:

- **Private collections** are only visible to the owner.

- **Public collections** can be accessed by any other user, even if they are not logged in.

Additionally, users should be able to:

- Search for collections using **collection name, username, or relevant tags**.

- **Download** items from public collections (only **logged in users** can download).

- **Register/Login** using **email and password authentication** or **Google authentication**.

- **Create collections**, add items, and perform **CRUD operations** on them.

Understanding the Theme Through Examples

- **GitHub** (Repositories)

  - Users create repositories that store their code and projects.

  - Repositories can be **public** or **private**.

  - Public repositories can be viewed by anyone, and other users can **download** the code.

  - Private repositories are only accessible to the owner or authorized collaborators.

- **Hugging Face** (Models & Data sets):

  - Users **upload** and share machine learning models and datasets.

  - These can be public or private.

  - Public models/datasets can be **viewed** by anyone, and other users can download and use them.

- **Kaggle** (Notebooks & Datasets):

  - Users **create** notebooks (code and data science projects).

  - Notebooks are grouped into collections that can be public or private.

  - Other users can view and download public notebooks.

- **FreeIcons.io** (Icons Collections):

  - Users create collections of icons.

  - Collections can be **public** or **private**.

  - Public collections allow other users to view and download icons.

Your Challenge

Your goal is to come up with a new and **unique use case** based on this theme. You cannot copy **GitHub, Hugging Face, Kaggle, FreeIcons** directly, but you should build something with a similar concept. A platform that allows users to store, manage, and share collections of something valuable.

Think outside the box! Here are some questions to spark your creativity:

- What kind of **digital assets** can people collect and share? (e.g., music samples, UI components, recipes, learning resources)

- How can users **benefit** from shared collections?

- What **unique features** can you add to enhance collaboration and engagement?

Core Requirements

All submitted applications must include:

- **Landing Page**:

    1. A visually appealing **homepage** that introduces the platform.
    2. The purpose of the platform must be clearly communicated and allow users to explore **public collections**.

- **User Authentication**:

    1. A Login/Registration system Email & Password authentication **OR** Google authentication.
    2. Users should be able to log in, log out, and manage their session.

- **Browsing Public Collections**: Both logged-in and non-logged-in users should be able to:

    1. Search for public collections using collection name, username, or tags.
    2. View details of public collections, including items inside them.

- **Collection Management**:

    1. Create, update, and delete collections.
    2. Add and remove items from collections.
    3. Set collections as Public or Private (Public collections can be viewed by all users, Private collections are only visible to the owner).

- **Downloading Items**:

    1. Logged-in users can download items from public collections.
    2. Non logged-in users can only view public collections but cannot download items.

- **Dockerize**:

    1. As part of the competition requirements, all teams must dockerize their web applications to allow seamless local execution with a single command.
    2. The entire application should start using this command **docker-compose up --build**

These features form the **minimum viable product (MVP)** for your submission. **You are encouraged to go beyond these requirements** by adding more features if you want.

Competition Rules

Technology Usage:

- Teams can use any **frontend and backend** frameworks of their choice.

- **WordPress and similar website builders are strictly not allowed**.

- **Firebase and Backend-as-a-Service solutions** are allowed, but **custom backends will receive more points** in evaluation.

- Both **SQL** and **NoSQL** databases are according to the design preference.

Functionality & Evaluation:

- The **working website** will be evaluated in a **10 to 15 minute live demonstration** to the judges.

- Teams **must be present** at the time of evaluation. **Failure to appear** will result in automatic disqualification.

Presentation Requirements:

- Teams should bring their **own converters / adapters** for projectors to ensure smooth presentation.

Originality & Ethics:

- All work must be **original** and completed exclusively by the **registered team members**.

- **Plagiarism** in any form is strictly **prohibited**.

Deadlines & Extensions:

- **No deadline extensions** will be granted, regardless of technical issues. Teams **must submit on time** or face disqualification.

Submission Requirements

Idea Submission (Day 1 - By 5:00 PM)

- Teams must submit their idea by 5:00 PM on Day 1.

- Once the idea is submitted, teams can start developing their web application.

- Submission Forms will be provided, teams can leave after 5:00 pm and complete their app from home.

- GitHub Repository Link (Public repo containing all source code).

- Team Member Names (As registered for the competition).

- Documentation (README file with setup instructions, tech stack, and usage guide).

- Postman Collection: Submit a Postman collection containing all API endpoints and example requests/responses.

- Docker files.

- Submission will be through a provided form at the venue.

- No extensions will be granted. Failure to submit by the deadline will result in automatic disqualification.

Presentation & Evaluation

- After submission, teams will present their projects to the judges. Don't use slides for presentation.

- Details of presentation order and format will be announced after submissions close.

- Teams must be present at their allocated presentation time; absence may lead to disqualification.

- Please bring HDMI adapters (if required by your laptop) to avoid any issues.

Evaluation Criteria

Your project will be evaluated based on the following criteria:

1. **Ideation & Innovation**

   - Originality & Creativity – How unique is your idea? Does it introduce something fresh and useful?

   - Purpose & Impact – Does the platform serve a meaningful purpose? Is it practical and valuable for users?

2. **Functional Completeness**

   - Core Requirements – Have all the mandatory features been implemented and fully functional?

   - Edge Cases & Error Handling – Does the app handle invalid inputs, errors, and unexpected scenarios smoothly?

3. **Visual Design & User Experience**

   - Responsiveness – Does the UI adapt well to mobile, tablet, and desktop screens?

   - Consistency – Are colors, fonts, and spacing uniform? Does the design follow a cohesive style?

4. **Technical Implementation**

   - Frontend – Is the frontend code clean, modular, and well-structured?

   - Backend Architecture – Is the backend organized, modular, and efficient? Are error logging and input validation implemented?

5. **Best Practices**

6. **Presentation & Documentation**

   - README File – Does the repository include a README with setup instructions and a brief project description?
   - Demo Effectiveness – Is the project well presented with a structured pitch and a clear live demonstration?

Competition Schedule & Timeline

Below is the official timeline for the Web Development Competition. Participants must adhere to all deadlines, as no extensions will be granted.

Day 1 – Competition Kickoff

- **2:30 PM** – The competition officially begins. The theme is announced and the teams begin brainstorming their ideas.
- **5:00 PM – Idea Submission Deadline**, teams must submit their selected idea before this time. Early submissions are allowed, after which teams can begin development.
- **5:00 PM onwards** – Teams may continue working remotely from home or their preferred location.

Day 2 – Final Submission & Evaluation

- **10:00 AM** – All teams must return to the venue.
- **12:00 PM – Final Submission Deadline**, teams must submit their GitHub repository link, team member names, and documentation through the provided form. Late submissions will result in **disqualification**.
- **Post 12:00 PM** – Judges review the submitted projects.
- **Presentation Schedule Announcement** – Teams will be informed of their presentation order and allotted time slot.
- **Presentations & Evaluation** – Each team will present their project and demonstrate their web application to the judges.

Post-Competition

- **Winners announcement** – After all evaluations, the winners will be announced, and awards will be distributed.

Final Note

Congratulations on taking on this challenge! This competition is not just about winning—it's about pushing your limits, thinking creatively, and building something innovative. Take this opportunity to learn, collaborate, and showcase your skills.

Stay focused, manage your time wisely, and most importantly, have fun! Whether you win or not, the experience and knowledge you gain will be invaluable. We look forward to seeing your amazing projects.

Good luck, and happy coding!