

Quality Requirements for BIP:

The portal should be intuitive and usable without any documentation for users familiar with common web platforms (e.g., event booking sites) [Usability].

All interactive elements should perform actions as described by their labels [Reliability].

Each tour guide profile should have a profile photo to be recognized by visitors [Usability].

The system should process updates within 500 milliseconds [Performance].

All displayed information must be accurate and up-to-date. [Reliability].

Registered users and guest users should be informed when the status of their application changes. [Usability].

If a user input error occurs, the portal should clearly identify the issue and highlight the relevant area [Error Handling].

The website layout should be responsive and properly sized on all device screens, including mobile, without overflow [Hardware].

Users should only access their data and public information of others, ensuring privacy [Security].

The portal should efficiently handle up to 100 concurrent users [Performance].

The portal should redirect guest users to verification, if their credentials are out-of-date. [Security]

TechStack:

We plan on using MySQL for storing and accessing our database, as it provides robust support for structured data and complex queries. For the backend programming language, we chose Python, using the Django framework to manage server-side operations. Django's built-in features and scalability make it a great choice for rapid development while maintaining a clean and maintainable codebase. On the front end, we plan to use React, which offers a modular approach to building user interfaces with its component-based structure. The ability to reuse components in React will help streamline development and enhance the application's performance.