Choose One or More Design Concepts That Satisfy the Selected Drivers

<table>
<tr><th>Design Decision and Location</th><th>Rationale</th></tr>
<tr><td>Structuring the system client portal using the Web Application</td><td>We would like users to interact with our application through a web browser. Rich user interface is not required to fulfill important quality attributes or constraints and requires the application to be installed on the user machine. QA-1,QA-2,QA-3 and CON-3 will be achieved by using Web Application Reference Architecture and uses minimum client-side resources.

Discarded Alternatives:
<table>
<tr><th>Alternatives</th><th>Reason for Discarding</th></tr>
<tr><td>Mobile Applications</td><td>The idea of using mobile applications is good for many projects but for this one it’s not as good and it’ll be useless to have it. The system shouldn’t be accessed by mobile phones and that's why we discarded this component.</td></tr>
<tr><td>Rich Client Application(RCA)</td><td>Having RCA in a project makes many things easier and it’s probably one of the hardest decisions we made for discarding it. The reason we are not using RCA is retrieving information from the internet and using a two-tier architecture while a web application uses multi-tier architecture. Also, the website must be accessed only by web browser which is not possible in RCA.</td></tr>
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<tr><td>Service application on the server side</td><td>Service side is the system that runs on the server. The service agent part from the reference architecture is adjusted to extract the access to the time server. Service applications don’t give a UI yet rather administration that is consumed by different applications. No different choices were thought of and disposed of, as the engineer knew about this reference architecture and thought of it as completely adequate to meet the requirement.</td></tr>
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The **UI** of the registration portal will be created using the bootstrap library which needs a small knowledge in HTML, CSS, and Javascript.	Bootstrap is a front-end framework which allows you to develop a very good looking and easy to use user interface and it doesn't need that much of knowledge to use it. If the developers have a small experience in HTML, CSS, and Javascript, they will be able to create the front-end of the project. This will meet the needs of the user for having an easy working and simple to use UI.
Backend of the project will be using the **LAMP** structure which is a group of open-source softwares	Developers must be capable of using the "LAMP" for creating the server and the backend of the project. TypicallyLAMP is Linux as the operating system, Apache as the Web server, MySQL as the relational database management system and PHP as the object-oriented scripting language. That will be our real challenge for the developers