

Organizational Requirement

❖ *Environmental Requirement*

- ✓ The hotel's webpage will be accessible 24-hours per day, every day.
- ✓ Everyone with an Internet-connected device, such as a smartphone, computer, or laptop, will be able to view the webpage, allowing users to access their reservations and bookings from any location.
- ✓ The website ought to be housed on a dependable server that guarantees optimal speed and availability.
- ✓ Establish a Content Delivery Network (CDN) to guarantee that users across the globe can access the website swiftly.
- ✓ Make that the website runs smoothly on widely used web browsers and in different languages, offering a consistent experience for users.

❖ *Operational Requirement*

- ✓ Through an easy-to-use interface, guests should have no trouble checking room availability, making reservations, and changing existing ones.
- ✓ The system should give the employees the resources they need to effectively handle changes, room assignments, and room statuses (clean, occupied, vacant).
- ✓ Dynamic pricing based on events, seasons, and occupancy should be supported by the system.
- ✓ Allow for a variety of payment options to give guests the best option.
- ✓ Establish a system that is easy to use so that visitors may leave evaluations and feedback.
- ✓ Assist in the planning and administration of events held on our hotel's property.
- ✓ Give our housekeeping team the tools they need to efficiently manage cleaning jobs and timetables.

❖ *Development Requirement*

- Maestral WebApp is going to be developed by using Symfony 4.2 Framework with MVC architecture. It was simpler to remove strict dependencies from the architecture by utilizing Bundles and Components, two of Symfony's most notable technological advantages.
- We used Twig, a contemporary PHP template engine, for the templating part. Despite being a template engine in and of itself, PHP has not evolved as much as the other template engines in recent years. To support this statement based on the actual facts as well PHP template lacks some features that the modern template must have:
 - **Concise**(has a very concise syntax, which make templates more readable)
 - **Template oriented syntax**(Twig has shortcuts for common patterns)
 - **Full Featured**(multiple inheritance, blocks, automatic output-escaping, and much more)
 - **Easy to learn**
 - **Have more security** etc..