Inventory Management System

Team 9

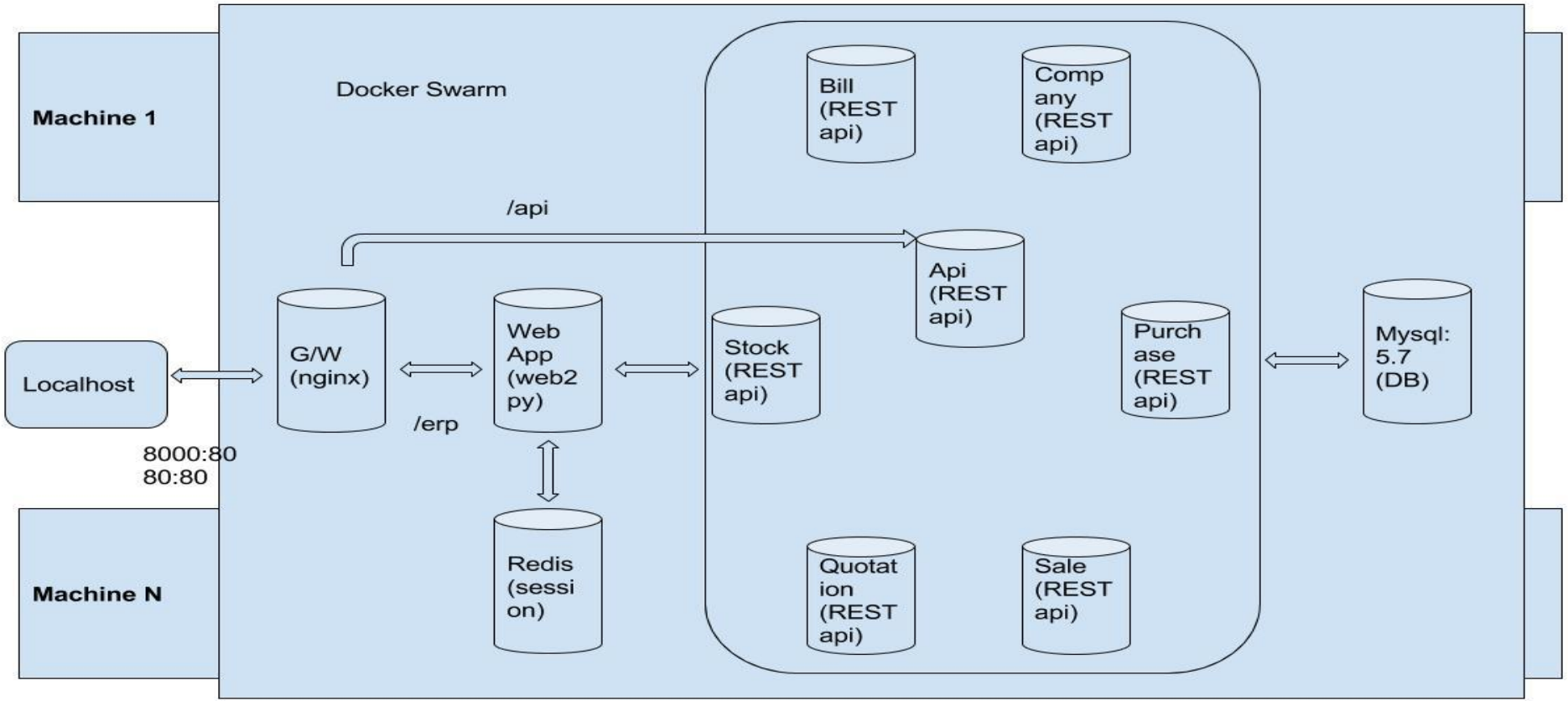
Problem Statement

The problem of	Goods resellers who procure goods from one selling party and resell them to other buying party had a problem of expanding their business with increase in volume of goods over time.
affects	Resellers, Vendors, Suppliers
the impact of which is	Difficulty in managing numerous transactions,managing the list of goods,parties and keeping track of various entities located across different locations.
a successful solution would be	To provide a streamlined web based solution which would facilitate seamless inventory management functionalities for the resellers.

Requirements elicitation, gathering, specifications

- Our customer is not the user, He was supposed to hire a worker who will be using the system to maintain the various inventory details.
- Customer had very poor understanding of computer capabilities and limitations.
- Customer was unable to describe the product he was expecting to be built.
- We had to collect whole information about how work was being done in the customer's organisation to get full idea of requirements.
- Provided as many features as possible and still keeping the product user friendly. Tried to automate every single task that they previously had to do manually.
- Requirements were evolving with time as product perspective was becoming clear and thus we had to add more and more requirements with time.

Architecture



Implementation and testing

- We built the first version of code in which we tried to keep low cohesion(dependency) between modules and high cohesion in each module.
- Descriptive variable and function names, Single Responsibility Principle.
- Added docker (a system container platform) to our system which made every service of our system a single virtual machine which allows us to extend and test each service individually.
- Each module was dependent on authorisation hence we automated unit testing of our modules by bypassing the authorisation and providing a default authorisation required for test explicitly by defining a separate function.
- Added a separate module to define dependencies globally.

Demo

Conclusion

- At the end we were able to build a fully functional and scalable system that addressed all the requirements specified in the SRS.
- We tried to keep in sync with the design document and made minimal changes in our implementation.
- Uniform work division among team members.
- We look forward to implement accel level hierarchy further with proper distribution of permissions.