Narrative for Technology of SmartReserve:

SmartReserve will connect to a relational database, SQL, and will use a multi-tenant architecture. This is because the data needs to be easily created, edited, read, and deleted to keep businesses running efficiently. The use of a multi-tenant architecture allows the company to save money while also making sure new features can be deployed easier. Although it is not as secure, SmartReserve will hold lots of restaurant’s data as well as the data of all of their customers. So, having a single-tenant architecture for thousands of people is extremely expensive for a small company, which is why SmartReserve is built with a multi-tenant architecture. SmartReserve will also go through the cloud based Amazon Web Services so their load balancing of the servers, container storage, and storage will be automatically handled by AWS. SmartReserve will specifically be using Amazon’s Codefresh Software Delivery Platform because it allows SmartReserve to be built, tested, delivered, and managed. It is flexible, simple, yet expensive. With this being said, it is worth the cost since it is extremely helpful in deploying the application and its feature quickly to customers. SmartReserve will be run on a web server for our website and an application server for the actual application. This is because SmartReserve will holds lots of data, and it does not need to be exposed to the internet through a web browser. Client data should be kept secure from outside threats. SmartReserve will use various open-source products like jQuery, mySQL, and Wireshark. These tools will always stay up-to-date on its latest version to keep the application and data secure. SmartReserve will also use developer tools like Bootstrap, GitHub, Visual Studio Code, and Docker to implement the application and test and debug it before it is deployed.