Assignment: A4 (20%) - Detailed Design, and Test Plans

In this assignment, you should develop a complete specification of all aspects of the design so as to serve as “blue print” for implementation. This document should include the following:

1. (15%) A complete Deployment Diagram (<https://www.lucidchart.com/pages/uml-deployment-diagram>) showing all major components of the system show where each component will reside, e.g., Cloud. If the system is deployed on multiple computers, you should show where each component resides. You should also clearly mark the components you developed and those that are acquired from external sources.
2. (15%) User Interfaces showing all screen designs to accomplish every use-case. If some of the interfaces are on a physical device, you should show the layout of the various buttons on the device with adequate explanation of each. If a voice interface is involved, you should describe each command that will be used to realize different functions.
3. (40%) Function/Method Definitions and Database Design – Describe each function you will implement showing the arguments and what the function will return when executed. If there is a database is involved show its complete design. If there are electrical circuits are involved, they should be shown with all the details. For example, if there is a resistor involved in the circuit, you should specify its value.
4. (25%) Test Plans – In this section, you should define a complete set of tests that will be conducted on the final deliverable system. This should include details of how the system data will be acquired. Show example data. Give details of Fail-Soft/Fail-Safe features in your design, where applicable.