Performance Testing

S.No	Project Name	Scope/feature	NFT - Risk Assessment						
			Functional Changes	Hardware Changes	Software Changes	Impact of Downtime	Load/Volume Changes	Risk Score	Justification
1.	Smart Farmer	Existing- Simulating the project through the Tinkercad with Temperature and humidity sensors, soil moisture, ultrasonic distance sensors, and DC and servo motors.	Moderate	High	High	No data transmission to Cloud	>80 to 90%	ORANGE	There is no Wi-Fi module in the Tinkercad simulator so data can't be sent to IBM Cloud.
2.	Smart Farmer	New- Simulating the project through the Wokwi simulator with Temperature and humidity sensor, ultrasonic distance sensors, servo motor, and LCD.	High	High	Moderate	The non-availability of certain sensors in Wokwi.	>30 to 40%	YELLOW	The random function is used for the Soil Moisture sensor to generate some random value.
3.	Smart Farmer	Existing – Visualizing the weather parameters in the Watson IoT platform.	Moderate	No Changes	Low	Delayed Visualization of Data.	>50 to 60%	GREEN	The stable internet connection is enough for a constant data transmission.
4.	Smart Farmer	Existing- Visualizing the weather parameters in the Watson IoT platform.	No Changes	No Changes	Moderate	Delayed Visualization of Data.	>40 to 50%	GREEN	The data can be easily transferred to other applications and also can be visualized in the dashboard.
5.	Smart Farmer	New- Login to the Smart Farmer mobile application and viewing the parameters.	Moderate	No Changes	High	Latency of data will be high.	>20 to 10%	GREEN	The parameter send by the module will be stored in the cloud and then sent to the mobile app, so there will be less latency.
6.	Smart Farmer	New – Controlling the motor from the mobile application and its indication in the simulator.	Low	Low	Low	Motor control will be delayed.	>30 to 20%	YELLOW	The motor control can be controlled by sending a response from the mobile app to the module.