SOFTWARE ENGINEERING PROJECT SUBMISSION

DESIGN ARTEFACTS

**INTERFACING OF IMPEDANCE ANALYZER**

For data acquisition

temperature control dielectric measurements

**CONTEXT MODEL**

HIGH LEVEL DESIGN MODEL

* CONTEXT MODEL
* INTERACTION MODEL
* STRUCTURAL MODEL
* BEHAVIORAL MODEL

**CONTEXT MODEL**

**INTERACTION MODEL**:

Connects the program to Instruments

Use case modelling

Gives initial values of temperature to initiate the experiment.

Starts the experiment.

Views & analyzes the graph plotting

Can stop or restart the program.

SYSTEM

Access the recorded readings and graphs(images) at anytime later.

Takes desired values

Continuously takes values(T)

**STRUCTURAL MODEL**

Back End Calculations

Initial calculations before start of experiment()

Checks for desired values of temperature()

Records all the readings and sends them to database()

Interface of software

User Input()

Display of graphs()

Plots properties vs. Temperature graph()

Plots temperature vs time graph()

Display of records in tabular form()

Sends Inputs

Sends readings to be plotted

Sends Readings

Networking

Continuous receiving og readings from temperature controller()

Receives desired values from Impedance Analyzer()

Sends reading to backend for calculations()

Data Storage

Stores tables and graphs in a folder()

Makes data accessible ()

**BEHAVIORAL MODEL**

-EVENT DRIVEN MODEL-

SYSTEM

SYSTEM

SYSTEM

YSTEM

USER

USER

SYSTEM

SYSTEM

YSTEM

SYSTEM

SYSTEM

TEMPERATURE CONTROLLER

IMPEDANCE ANALYSER