SE Project Week 2 – Algorithm Visualizer

SRS and Process Model

Software Requirements Specifications (SRS)

1.Introduction

1.1)**Purpose:** Purpose of this project is to create an Algorithm Visualizer web-app

1.2)**Scope:** This application will be useful for:

- Students
- Lecturers
- Programmers

2.Overall Description

2.1)**Product Perspective:** The target is an algorithm visualizer software whose target audience are majorly students and lecturers

2.2)**Product Function:**

- Takes user input on data and constraints
- Displays visualizations of outputs of algorithms
- Algorithmic information: includes description, pseudo-code, complexities, real world applications

2.3)**User Characteristics:**

- Should be easily understood by students, preferably above 10^{th} grade
- Lecturers who want to teach a particular topic in an easy way
- Programmers who want to develop and brush up their skills

2.4)**Constraints:**

- Limited number of important algorithms
- Time taken to implement algorithms

3.Specific Requirements:

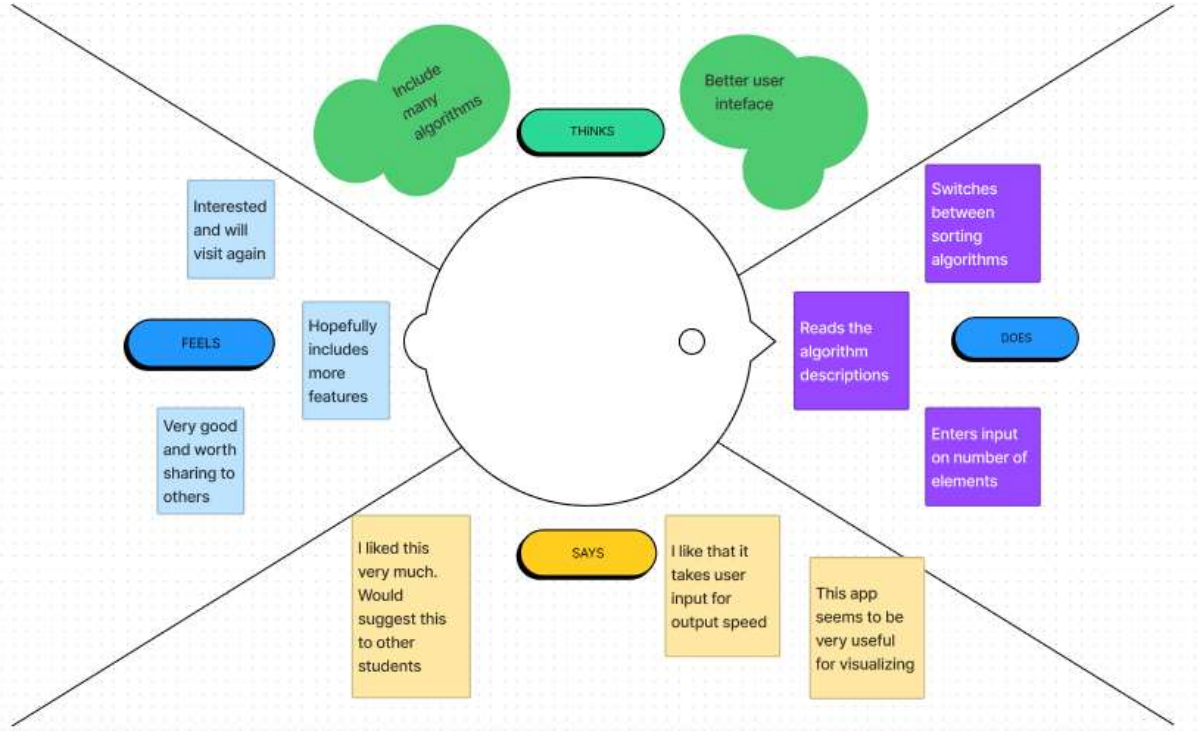
3.1)Functional Requirements:

- Should display the output of algorithm step by step on the screen
- Correctness of the output

3.2)Non Functional Requirements:

- Clarity of the output
- Time taken to display the output

Empathy Map:

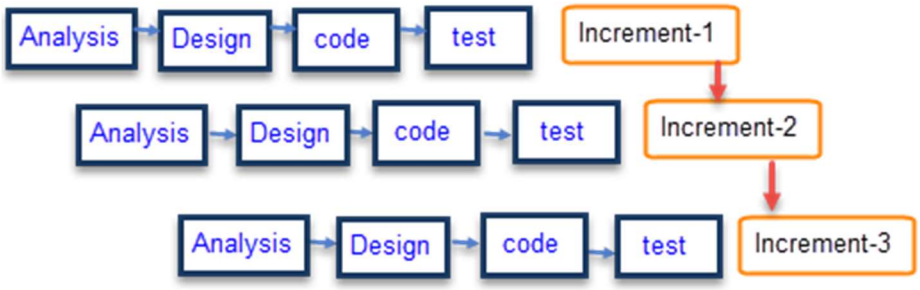


Type of Model:

Incremental model:

Incremental Model is a process of software development where requirements divided into multiple standalone modules of the software development cycle. In this model, each module goes through the requirements, design, implementation and testing phases.

Example flowchart:



Incremental Model

We are using an incremental model for this SE project