Project Initialization and Planning Phase

Date	16 June 2025
Team Lead Name	Jayanth Srinivas Bommisetty
Project Name	Sloan Digital Sky Survey (SDSS) galaxy classification using machine learning
Maximum Marks	3 Marks

Define Problem Statements (Customer Problem Statement Template):

Manual classification of astronomical galaxies is a labor-intensive and subjective process, often requiring expert interpretation. With the increasing volume of astronomical data from large-scale surveys like SDSS, this task becomes impractical at scale. Traditional methods struggle with consistency and efficiency in identifying complex galaxy morphologies. Therefore, this project aims to automate galaxy classification using machine learning, enabling faster, more accurate, and scalable analysis of galaxy images.
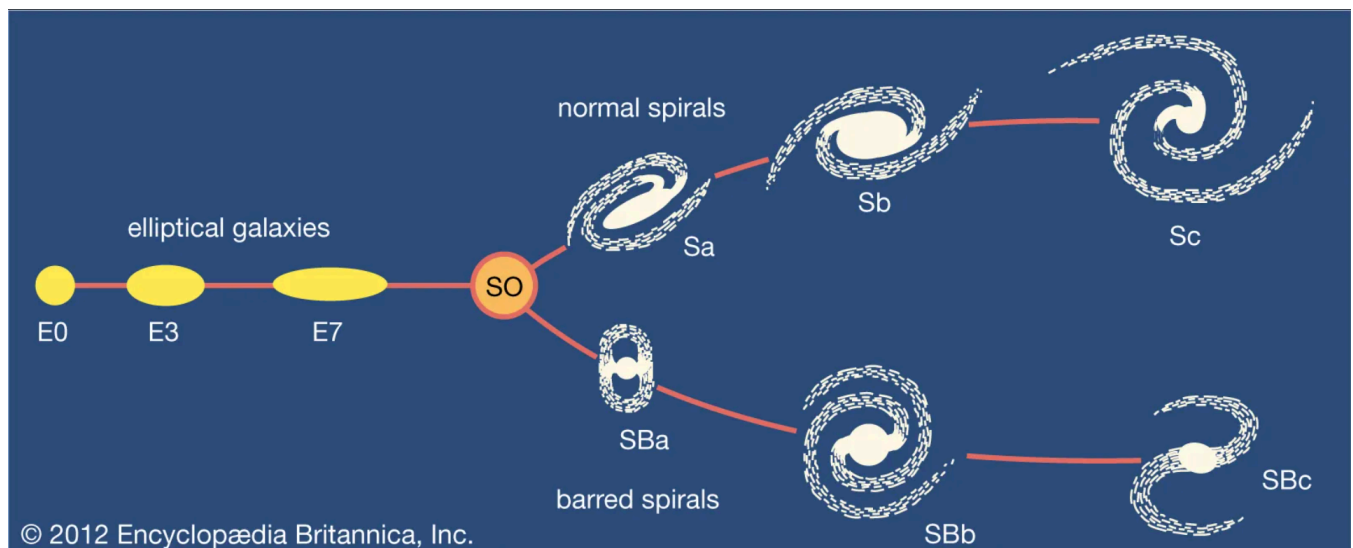
Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	I am a student learning Astronomy	Identify different galaxies	Most of them are looking similar but actually they are different	Less availability of resources and data about it	To make a model that could predict the galaxy type