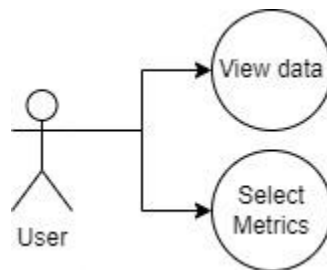


Use Case #1: The user can view the clustered repository data with each cluster color coded.

Use Case #2: The user can select the two metrics to display the clustered data on.



Component	Priority	Requirement Name	Requirement Description
API	High	Handle GET Requests	The API should be able to handle GET requests which will return all post-clustering data
API	High	Handle POST Requests	The API should be able to handle POST requests which will return post-clustering data on the two input metrics
API	Med	Handle Invalid URLs	The API should return code 404 if a non-existent subdomain access attempt is made
API	Low	Load Balancing (Scalability)	The API should have some form of load balancing in case many API calls are made at the same time
Model	High	Cluster Data	The model should be able to cluster the repositories based on the numeric metrics.
Model	low	Calculate Feature Importance	The model should calculate feature importance and return a list of top features to be used in the front end as suggestion tool.
Front End	High	Display Data	The Front End should display the clustered data the machine learning algorithm returns on a graph
Front End	High	Send/Retrieve Data	The Front End should send two metrics to the API with a POST request and recieve the data returned by the API
Front End	Med	Change Metrics	The Front End should allow the user to change the metrics that the clustered data is shown on
Front End	Med	Show Repo Name on Hover	The Front End should show a popup displaying the repository's name when the user hovers over it on the graph