Release engineering Case study.

Tech Design Template.

Link to architectural Diagram: <u>Diagrams</u> or <u>GitHub account</u> with screenshots **PROJECT**:

Creating a Favicon that illustrates financial independence for Cellulant Organization. The vision of the organization is to enable seamless payment for business and banks across the African Content.

BACKGROUND AND REQUIREMENTS:

To be able to create a favicon that portrays the company value while considering financial independence, we need certain requirements:

Divided into two aspects the technical and non-technical, For the technical part we will need people familiar with the design and also those familiar with using VMS that can easily auto scale.

opt for AWS console for the deployment bit as you can easily auto scale the application automatically according to one's needs, monitor with cloud events.

PROBLEM STATEMENT:

The intent is to create a design that allows financial independence for the end-users while trying to accomplish the Cellulant mission of creating opportunities that accelerate economic growth in Africa.

A user is supposed to view the design as a symbol of their growth when it comes to managing their finances while making payments across different platforms. Example a user trying to access mobile Banking through Cellulant platform is able to manage their savings and earnings while carrying out transactions.

Design:

Favicon, is an image of a hand uplifting a person to reach greater heights in terms of finances, this is a symbol trying to picture financial independence gained by the user during their usage of the Cellulant Applications.

APPROACHES:

Since it is customer centric type of application, approaches that can be applied are Iterative approach, system prototyping method and agile approach.

Iterative is suitable as we can design a small portion give it for testing and use the feedback provided to improve on the design. Weakness takes a lot of time the end-user will have to be patient it to be fully functional. Cannot afford that rem it's a payment platform for customers across the continent.

System Prototyping Approach, can be applied too. Not so effective as development is done piece by piece and only critical parts are made available to user. This can be time consuming yet we need a design that can take effect immediately.

I would recommend the agile methodology, where the end-goal is customer satisfaction while there is always room for improvement and changes. It also takes short time to deliver the results. Example in our design we focus on financial independence while making transactions in Cellulant, customer needs may change to managing the cash flow while using Cellulant platform. This creates room for further designs that suit the customer.

(Diagrams provided)

TESTING:

As there are different teams collaborating on the project using the agile methodology, GitHub is used to track changes that could be made. We also need to test the code to ensure it meets requirements. Circleci is a CICD tool which can be connected to a GitHub account to test the build stages in AWS. With Circleci a config.yml file can be created with basic stages like checking dependency environment and the api code.

Monitoring Consideration:

Operational Consideration:

Being customer centric we are using autoscaling to accommodate numerous requests from a user. With AWS we are able to not only save on cost but also depending on requests e receive.