Service Summary Cards (SSC)

AWS Step Function

What?
- AWS Step Functions is a serverless function orchestrator that makes it easy to sequence AWS Lambda functions and multiple AWS services into business-critical applications.
- AWS Step Functions state machines (workflows) are defined in JSON using the declarative Amazon States Language.

Why?
- Through its visual interface, you can create and run a series of checkpointed, event-driven workflows and build distributed applications. Workflows manage failures, retries, parallelization, service integrations, and observability so developers can focus on higher-value business logic.

When?
- You want to create end-to-end workflows to manage jobs with interdependencies for common use cases like, Data processing, DevOps and IT automation, E-commerce, Web applications.
- You want to focus on application tasks rather than building complex state management into all of your tasks.

Where?
- AWS Step Functions has built-in fault tolerance and maintains service capacity across multiple Availability Zones in each region to protect applications against individual machine or data center failures.

Who?
- Step Functions manages operations and underlying infrastructure to ensure your application is available at any scale.
- You can run tasks on AWS, your own servers, or any system that has access to AWS

How?
- Using AWS Step Functions, you define state machines that describe your workflow as a series of steps, their relationships, and their inputs and outputs. States can perform work, make choices, pass parameters, initiate parallel execution, manage timeouts, or terminate your workflow with a success or failure.

How much?
- Step Functions counts a state transition each time a step of your workflow is executed. You are charged for the total number of state transitions across all your state machines, including retries.
- You may incur additional charges if your application workflow utilizes other AWS services or transfers data.