

Scope of Work: Payments Platform

The descriptions below pertain to the scope of work for the payments platform initiative of Sahara Cloud (“Sahara”).

Motivation

Part of Sahara’s product offering (<https://haracloud.com>) is the ability for users to access custom hardware on an as-needed basis. Similar to a Cloud service provider like Amazon Web Services, Sahara’s business model is based on a combination of a monthly subscription and a usage fee. The usage fee is computed by taking a fixed rate derived from the underlying hardware of the given job multiplied by the time (in ms) the user spent actively running the job. The purpose of this work is to create a payments platform by which Sahara can automate the computation and dispersal of a monthly bill to customers based on subscription and usage.

High-Level Work Phases

The work required for this project can be broken down into 4 stages at a high-level:

- 1) Requirements and Design
- 2) Implementation
- 3) Test and Integration
- 4) Deployment

Requirements and Design

In this phase, the implementing team will work with the Sahara engineering and product teams to better understand 1) the product as it exists 2) the desired functionality of the payments platform and 3) the aesthetic design of the invoice page. The deliverable consists of an informal requirements document that outlines:

- An aesthetic proposal for the invoice page (i.e., a wireframe)
- A description of the underlying platforms that will be used to implement the invoice page
 - Example: React/NodeJs
- A definition of the new API’s and data structures (and/or modifications) that will be built to supplement the payments platform.
 - Note that usage data is already collected in a database as is user information. The new API’s/data structures will simply be used to aggregate the two as necessary.

Estimated time: 1 week

Implementation

In this phase, the implementing team will use the previous phase's deliverable to guide the actual implementation of its proposal. Each week(ish) will be broken out into a sprint, where the implementing team will work closely with the Sahara engineering team to track progress and resolve roadblocks that arise. The final deliverable is a demo to the Sahara team of the fully-featured payments platform as agreed upon.

Estimated time: 4 weeks

Note: There will likely be overlap of this phase and the Test and Integration phase.

Test and Integration

In this phase, the implementing team is tasked with creating a mechanism by which to automate (as much as possible) testing of the payments platform. Note that there is no formal deliverable on the testing front.

Estimated time: 2 weeks

Note: There will likely be overlap of this phase and both the Implementation and Deployment phases.

Deployment

In this phase, the implementing team will work with Sahara's DevOps team to deploy the finished payments platform into 1) Sahara's test environment such that the Sahara team can perform more concentrated testing and 2) Sahara's production environment. There is no formal deliverable for this phase.

Estimated time: 1 week

Note: There will likely be overlap of this phase and the Test and Integration phase.

Important Notes

- Sahara will provide all pertinent information about the existing infrastructure and system requirements/constraints upon request.
- The Sahara engineering team will be available for (at least) bi-weekly meetings with the implementing team to discuss whatever needs to be discussed in any given phase.
- The Sahara engineering team will implement any supporting software/infrastructure that is tangential but necessary for the architect page.
 - This is mostly reserved for bug fixes within the existing product.
 - Most necessary data and API's for this project already exist - the implementing team will simply need to write software to consume them appropriately.