Mini RAD

### **Introduction:**

This document outlines the requirements for the cloud-optimized application using multiple microservices designed by our project team. Our objectives for this project is to design, develop, and deploy a cloud-optimized application using multiple microservices. The project members are:

* Collin Dahlback
* Ethan Stone
* Roshit Niraula.

### **Project Overview:**

The project will consist of three microservices:

* User Authentication and Login Services: This feature shall handle login services for users and authenticate the validity of logins.
* File Storage and Upload: This microservice shall manage the uploading of files via S3-compatible storage. The microservice can be used via the user to upload files for cloud storage.
* File viewing: This microservice shall manage users' ability to view uploaded files.

### **Scope:**

* Development of the three Microservices listed within the project overview.
* Usage of S3 Compatible storage.
* Containerization of Services using Docker
* Deployment via Docker Compose

### **Functional Requirements:**

* The login services shall leverage API services/ endpoint to validate user login credentials.
* The file upload shall provide endpoints for users to upload files.
* The file display and get shall allow users to view and retrieve files uploaded.

### **User Case and Test Scenarios:**

* The user requests to log in and login services will validate the credentials.
* The user uploads files to S3-compatible storage via upload.
* The user retrieves uploaded files and can view a list of those uploaded files.