

Assumptions:

- The main server on which the API is running has extensive operations to perform hence to avoid overloading it we will create an additional lambda/microservice
- The API, SNS and Lambda are all under the same AWS account hence we do not need additional authentication to communicate between them
- The identity of the user can be inferred from authentication hence there is no need for a payload in the request

Notes:

- The combination between SQS and SES offers a scalable and stable solution
 - SQS, Lambda and SES are all scalable solutions
 - SQS guarantees that even if our lambda wouldn't be able to process our message for whatever reason we can create another consumer which will be able to do the same task
- I also added a possible optimization in case the file size is very big or is requested very often. A solution here would be to keep the S3 file up to date and deliver it via a pre signed S3 URL in the email.

