Developing a Cloud-Based Service  
for Basic Data Analytics

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# Abstract

Write two short paragraphs to summarize the whole program and what you have developed.

# Introduction

Short introduction to the whole program. What is it about? The results of the cloud program/service, the cloud-based development methodology you are adapting, etc.

This software documentation report should be based on a software methodology documenting all of the specified requirements (I have given to you in the specification of the program) as well as design, implementation and deployment of the program.

# Cloud Software Program/Service Requirements

Use the program specifications I have given to you. What you’re developing, what are the requirements (i.e. user stories based on the required functions, use cases, etc.).

Explain how your program/service works at various levels of abstraction.

# Software Architecture and Design

What does the big picture of the program look like and what is the program architecture? Create software architecture diagram for your program.

The functional components of the program as it is established on the cloud. Include also, e.g., the scrapping algorithm, the sorting algorithm, the searching algorithm, and the classification algorithm.

Detailed design of these components of the software including classes, databases (noSql), etc.

Detailed design of the user interfaces and its related functionality and design decisions.

**You may also include:**

Real-world constraints of the used cloud platform environment.

# Used Cloud Services and its Interfaces

What are the cloud services used in the program/service?

# Implementation

Implementation details need to be explained, Codes for each part based on the requirements, functions, libs, etc.

# Data

What does the data model (e. g., noSql for storing documents under Google BigTable, etc.) look like and where it is being stored?

# The Used Cloud Platform

What does the target platform deployment environment (e.g., Firebase, Google App Engine, etc.) look like? What is its architecture and components.

# Deployment on the Platform

What is the mapping between program and the used cloud platform? How did you deploy your program/service.

# User Support

How the user operates and uses the program. User documentation. Links to the source code and to the program/service on the cloud.

# Conclusion

Overall conclusion, issues need to be resolved, and recommendations.

# References

References as being cited anywhere in the document.