Template - Requirements Specifications Document

# Introduction -

## Purpose -**To enhance the revenue of the company and understand the customers by analyzing the competitors data. By analyzing the data the company can provide customers with customized insurance policy to increase sales. The company also wants to calculate royalties of past customer to enhance the revenue**

## Intended Audience and Use – **the stakeholders, data analytics team, data engineers ,management.**

## Product Scope – **is to develop business strategies to increase the revenue by customizing the products to individual customers.**

## Definitions and Acronyms -

# Overall Description –

**The project aims to leverage the Big Data Ecosystem to analyze competitor data, extracted from various sources such as web scraping and third-party datasets. This analysis will enable a Health Care insurance company to gain insights into customer behavior, health conditions, and preferences. By customizing offers and calculating royalties for past policyholders, the company intends to enhance its revenue. The project will be implemented in an AWS environment using S3 for data storage, Redshift for data warehousing, Databricks for data processing, and PySpark for coding.**

## User Needs - *Describe who will use the product and how. Understanding the various users of the product and their needs is a critical part of the SRS writing process.*

## Assumptions and Dependencies - *What are we assuming will be true? Understating and laying out these assumptions ahead of time will help with headaches later. Are we assuming current technology? Are we basing this on a Windows framework? We need to take stock of these technical assumptions to better understand where our product might fail or not operate perfectly.*

# System Features and Requirements -*In order for your development team to meet the requirements properly, we must include as much detail as possible. This can feel overwhelming but becomes easier as you break down your requirements into categories.*

## Functional Requirements

## Which disease has a maximum number of claims.

* Find those Subscribers having age less than 30 and they subscribe any subgroup
* Find out which group has maximum subgroups.
* Find out hospital which serve most number of patients
* Find out which subgroups subscribe most number of times
* Find out total number of claims which were rejected
* From where most claims are coming (city)
* Which groups of policies subscriber subscribe mostly Government or private
* Average monthly premium subscriber pay to insurance company.
* Find out Which group is most profitable
* List all the patients below age of 18 who admit for cancer
* List patients who have cashless insurance and have total charges greater than or equal for Rs. 50,000.
* List female patients over the age of 40 that have undergone knee surgery in the past year

## External Interface Requirements - *You may also have requirements that outline how your software will interact with other tools There are several types of interfaces you may have requirements for, including:*

### User

### Hardware

### Software – **utilize AWS services like S3,redshift,emr studio, databricks, Pyspark,jira and github.**

### Communications

## System Features - *System features are a type of functional requirements. These are features that are required in order for a system to function.*

## Nonfunctional Requirements - *Nonfunctional requirements, which help ensure that a product will work the way users and other stakeholders expect it to, can be just as important as functional ones. These may include:*

### Performance requirements – cleaning and transforming data and loading data to redshift and perform query.

### Safety requirements

### Security requirements **access key and secret key for I am role to access the data from AWS**

### Usability requirements

### Scalability requirements

## 