Template - Requirements Specifications Document

# Introduction -

## Purpose -*The purpose of the (SRS) is to provide a complete guide for the data Engineering team to understand and implement the features and functions as per required for the Health Care Insurance Project.*

## Intended Audience and Use – *The SRS is intended for developers, testers, and project managers working within the Health Care Insurance Project where developers use it as a reference for coding and implementation, testers use it for validation and project managers use it for oversight of project.*

## Product Scope – *The Health Care Insurance Project aims to enhance revenue and customer understanding from big data ecosystem to improve customer satisfaction.*

## Definitions and Acronyms – *AWS S3 , AWS REDSHIFT , AWS EMR STUDIO , DATABRICKS , PYSPARK , JIRA , GITHUB.*

# Overall Description -

## User Needs – *Health Care Insurance Project is designed to meet the needs of insurance company which include complete analysis of customer behavior tracking and revenue enhancement.*

## Assumptions and Dependencies – *The project assumes compatibility with the AWS ecosystem and Pyspark where Development of the project depends on third-party data sources and tools.*

1. System Features and Requirements –

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 -

### User: *Provide data visualization*

### Hardware: *Compatibility with AWS S3 , Redshift ,Databricks.*

### Software: *External tools used by Third-party sources and data* scraping.

### Communications: *AWS services and Data pipelines*

## System Features - *Implement a data pipeline for competitor Analysis, develop mechanisms to track customer behavior, customization of offers from customer profiles and Royalty Calculations.*

## Nonfunctional Requirements -

### Performance requirements: *Response time for this project should be within the limit of 2 weeks.*

### Safety requirements: *The data provided for this project is sensitive information of Health Care Insurance valued customers so Implementation of the measures to secure data is required.*

### Security requirements: *Access controls to the access key and securety credentials from all the tools like AWS,Databricks.*

### Usability requirements: *Ensure a user-friendly interface for the stakeholders.*

### Scalability requirements: *Design the system to handle BIG data whose volumes are increasing per day and user interactions.*

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