

ANALYTICS FOR HOSPITAL HEALTH CARE DATA

NALAIYA THIRAN PROJECT BASED LEARNING

ON

PROFESSIONAL READINESS FOR INNOVATION,EMPLOYABILITY A

ENTREPRENEURSHIP

A PROJECT REPORT

SABARI RAJA A	911519205018
SIRAJ ANWARDEEN	911519205022
VIGNESHWARAN	911519205027
SHAKKIF IBRAHIM	911519205019
`	

BACHELOR OF TECHNOLOGY

IN

INFORMATION TECHNOLOGY

MOHAMED SATHAK ENGINEERING COLLEGE

November 2022

TABLE OF CONTENTS

CHAPTER NO	TITLE	
	ABSTRACT	
1	INTRODUCTION	
2	OBJECTIVE	
3	IDEATION PHASE	
	3.1 Literature Survey	
	3.2 Empathy Map	
	3.3 Ideation	
	3.4 Problem Statement	
4	PROJECT DESIGN PHASE 1	
	4.1 Proposed Solution	
	4.2 Problem Solution Fit	
	4.3 Solution Architecture	
5	PROJECT DESIGN PHASE 2	
	5.1 Customer Journey Map	
	5.2 Solution Requirements	
	5.3 Data Flow Diagrams	
	5.4 Technology Stack	

6	PROJECT PLANNING PHASE	
	6.1 Prepare Milestone and Activity List	
	6.2 Sprint Delivery Plan	
7	PROJECT DEVELOPMENT PHASE	
	7.1 Project Development - Delivery of Sprint-1	
	7.2 Project Development - Delivery of Sprint - 2	
	7.3 Project Development - Delivery of Sprint - 3	
	7.4 Project Development - Delivery of Sprint - 4	
8	CONCLUSION	
9	REFERENCES	

ABSTRACT:

The healthcare sector is dominated by the expertise, skills, and knowledge regarding the ins and outs of the medical field. Since every step is taken and a decision made can alter the course of action and affect human health and life, so alongside the above, there are also factors beyond these that influence the healthcare sector which include accuracy in decision making, and confidence in tasks, and operations. This accuracy is brought through data analytics, an aspect that spins the thread on which the healthcare sector operates. With technology

constantly evolving, healthcare is on its way to becoming another sector whose future is driven by data.

In any industry, a data analytics and Business Intelligence (BI) solution can enhance operational efficiency, curtail costs, and simplify processes by calculating and employing KPIs for detecting opportunities and shaping up decision-making, making every participant from the patients and providers to payers and suppliers, unlocking the value of data benefits for everyone.

While healthcare management has various use cases for using data science, patient length of stay is one critical parameter to observe and predict if one wants to improve the efficiency of the healthcare management in a hospital.

This parameter helps hospitals to identify patients of high LOS-risk (patients who will stay longer) at the time of admission. Once identified, patients with high LOS risk can have their treatment plan optimized to minimize LOS and lower the chance of staff/visitor infection. Also, prior knowledge of LOS can aid in logistics such as room and bed allocation planning.

1.INTRODUCTION

1.1Overall description

Introduction to Healthcare Analytics is designed for aspiring healthcare data champions and orients learners to this unwieldy field through the lens of three concepts: organizational mindset, analyst skill set, and technology tool set. Learners walk through a day in the life of a healthcare analytics manager to illustrate all of the components required to turn raw data into a business success story. Topics include the analytics life cycle, common use cases for analytics, roles and responsibilities for delivering healthcare analytics, and covers expectations of analytic teams.

- Articulate the role of health analytics in patient care, case management, and business operations
- Summarize the different stages of the analytic product life cycle and the business purpose of each stage
- Convince others why health analytics is an essential competency required if a health organization is to not just be competitive, but thrive
- Compare and contrast the differences between the following terms: analytics and informatics; analysis and analytics; data mining and machine learning; statistics and analytics; analytics and data science; and, business intelligence and visualization
- Summarize the common barriers to healthcare analytics being successful
- Identify the various roles of analytics in an organization

a. Problem Statement

- Advancements in telemedicine

- Enhanced patient engagement
- Wearables that provide real-time alerts
- Disease prevention/population health
- Improving/refining treatment standard

Purpose

Health Data analytics refers to analysis of the data using quantitative and qualitative techniques to be able to explore for trends and patterns in the data – to “acquire, manage, analyze, interpret and transform data into accurate, consistent and timely information.”

Health Informaticq refers to “a collaborative activity that involves people, processes and technologies” to use the information derived from data analytics to “improve the delivery of health care services and improve patient outcomes.”

Motivation and scope Product Perspective:

It describes the current events or summarizes the past events by generating reports with the help of statistical tools such as tables and graphs. Thus, it helps medical practitioners to study and understand the

patient's behavioral patterns in the past with the help of the patient's operational data, which can be used to solve problems in current situations.

Product Features

The healthcare industry generates an enormous amount of data coming from various sources, such as EHRs (Electronic Health Records), LIMS (Laboratory Information Management System), diagnostic or monitoring instruments, supply chains, insurance claims/billing, pharmacy, real-time locating systems [3], and social media. The data that are collected are used in continuous learning by employing various technologies and processes to derive insights from the information, which will help improve the quality of healthcare. In addition, the reduction in storage costs and the development of advanced architectures have led to large volumes of data being stored, processed, and managed, using the existing traditional systems adopted by the healthcare industry.

Assumptions and Dependencies

- i. Constraints are limitations which are outside the control of the project. The Project must be managed within these constraints.
- ii. Assumptions are made about events, or facts outside the control of project. External dependencies are activities which need to be completed before an internal activity can proceed.

- iii. Constraints, assumptions and dependencies can create risks that the project may be delayed because access is not provided to the site (assumption).
- iv. Assumption will be that the complexity may arise due to large unstructured data set.

Constraints

- v. Hardware limitation and timing constraints.
- vi. High feature may not correspond to semantic similarity.
- vii. System Environment Windows subsystem for Linux with Ubuntu operating system will be required to run the application

1. OBJECTIVE

Healthcare prediction is another data analytics method focusing on reducing future medical costs. Predictive technique uses patient medical history to evaluate all the potential health risks and predict a future medical treatment in advance (LexisNexis 2015). (Loginov et al 2012) stated that by retrieving and reviewing past patient details, information and diagnoses from the databases, predictive methods can take a place through forecasting, reducing time and costs. Parkland hospital in Dallas, Texas has launched a predictive system which scans all patients' details and information to identify potential risks and outcomes. As a result, the hospital has saved more than half a million dollars, especially in heart

failure and disease predictions in terms of performing patients' monitoring and avoiding future complications . Predictive analytics supports healthcare sectors to achieve a high level of effective overall care and preventive care, as predictive systems' results allow treatments and actions to be taken when all the risks are recognized in early stages, which aids for minimizing costs. Furthermore, Patients can also work and support medical care by following up and updating their medical status, so they can get the necessary treatment at the right time. The technology era has added significant value to the healthcare decision support system, since decision making systems in healthcare care sectors can be enhanced by focusing on patient diagnoses, behavior, and prevention in order to reach a high level of care and improve healthcare economics . In the healthcare sectors, predictive analytics can be achieved in many ways such as; a medical care delivery success, which can be achieved by using a model that proposes algorithms in order to assist medical treatment for interacting diseases, which can reflect in capturing patient's behavior and interactions.

2. IDEATION PHASE

a. Literature Survey

The healthcare industry historically has generated large amounts of data, driven by record keeping, compliance & regulatory requirements, and patient care. While most data stored in hard copy form, the current trend is toward rapid digitization of these large amounts of data. Driven by mandatory requirements and the

potential to improve the quality of healthcare delivery meanwhile reducing the costs, these massive quantities of data (known as 'big data') hold the promise of supporting a wide range of medical and healthcare functions, to derive previously untapped intelligence and insights from data to address many new and important questions

Data Analytics for Hospital Health Care - Data:

That information technology has improved healthcare industries, but they also highlighted some of the difficulties related to the use of information technology in healthcare sectors, as they noticed that it is hard to implement information technology in small clinics and organizations, with high costs due to reduced efficiencies of scale. Therefore, IT implementation requires long term training and retention of skilled professionals

Topological Data Analysis For Hospital Health Care-Data

One of the most important elements in dealing with and managing data is to know where and how this data will be stored once when it is collected. The traditional methods of storing and retrieving such data are not efficient anymore, since it was structured and stored in data warehouses and relational databases, after extracting and loading it from different outside sources. However, this data is transformed and classified before being ready to use and function .The numbers of data sources now and that a huge amount of data has become available, so this growth of data will absolutely require an agile database which can deal with the data logically and through data synchronization in order to adapt to the rapid data evolution.

Patients Role in Healthcare Analytics:

This section is concerned about how individuals (and patients in specific) can improve healthcare analytics through understanding the small and personal data, as well as educate themselves in how to collaborate with the healthcare data analytics to reach a high level of efficiency and accuracy. It was discussing the same point when he identified the term “citizen science”, where nonprofessional and educated individuals are skilled enough to conduct and support healthcare analytics system. Accordingly, this will require organizations to train individuals how to follow up and track their health information, as well as self-monitoring. Principally, to perform good data analytics, first of all we should teach individuals how to understand and realize the importance of dealing with such data, for instance how to deal with breast cancer .However, how much our patients are educated and skilled to provide us with the data we expect, medical professionals still highly need to test and clarify this data to consider it and keep it on record. Also, he added that once when the data has been tested and clarified, we then need to find out how to change an individual’s behaviour, starting with parents and guardians who are responsible for raising their children. However, Understanding of information are not enough. Furthermore, patients should identify the risks and detect where to change, for instance; some patients know that they have a high level of blood pressure but they don’t know how to deal with it and control it: should they change drugs? Change eating habits and life styles? Do more exercises? information through filling and completing some online forms in order to keep track of their state of health, as well as to provide the suitable advice and treatment when needed. Moreover, patients can share some information with other patients, so they increase their knowledge, background and awareness in the healthcare analytics sectors regarding their conditions. Finally, patient who share

their symptoms, diagnoses and results with others can gain benefit from the ability to understand their health conditions by comparing them with other patients.

Healthcare Predictions and Decision Support System (DSS)

Healthcare prediction is another data analytics method focusing on reducing future medical costs. Predictive technique uses patient medical history to evaluate all the potential health risks and predict a future medical treatment in advance stated that by retrieving and reviewing past patient details, information and diagnoses from the databases, predictive methods can take a place through forecasting, reducing time and costs. Parkland hospital in Dallas, Texas has launched a predictive system which scans all patients' details and information to identify potentials risks and outcomes. As a result, the hospital has saved more than half a million dollars, especially in heart failure and disease predictions in terms of performing patients'

monitoring and avoiding future complications a positive influence on operating efficiency, a larger number of full-time employee equivalents hinders efficiency outcomes, which indicates the importance of enhancing labor efficiency among carriers.

Role of Predictive Analytics in Medical Healthcare

Predictive analytics supports healthcare sectors to achieve a high level of effective overall care and preventive care, as predictive systems' results allow treatments and actions to be taken when all the risks are recognized in early stages, which aids for minimizing costs. (Conley et al 2008). Furthermore, Obenshain (2004) said that patients can also work and support medical care by

following up and updating their medical status, so they can get the necessary treatment at the right time. The technology era has added significant value to the healthcare decision support system, since decision making systems in healthcare care sectors can be enhanced by focusing on patient diagnoses, behavior, and prevention in order to reach a high level of care and improve healthcare economics.

Financial Factors in Healthcare Predictive Analytics

The most significant and obvious result of using such technology within the healthcare sectors is its results on costs. Because of cost, information is one of the main aspects that have a big effect on the cost of healthcare predictive analytics. Medical care systems have focused on increasing healthcare analytics performance as well as minimizing the cost by simplify unstructured clinical record and reducing irregular information. Consequently, large quantities of information then will be managed and controlled smoothly and efficiently . Predictive analytics can assist to avoid and reduce inaccurate prediction costs plus time for the reason that it makes the data sourcing cost lower by specifying the desired and necessary data only, since the data is simplified, standardized and exists in historical clinical databases.

Healthcare Analytics & Real Time

The real time analytics produces more accurate results and information, since it evaluates current patients' history and conditions, therefore investigating patients' diagnosis correctly and offering the best treatment. Real time monitoring techniques guarantee to keep data up to date and increase the quality of information, as assumed so by Taylor (2010). She believed that real time matters in healthcare analytics are very significant for the reason that it generates

accurate results, such as where diabetes patients can recover if their ailment is discovered and treated correctly in the earlier stages. Walker et al (2012) agreed with that however they also highlighted some of its disadvantages, such as high cost, its high required level of training and long time to complete. The objective of this Report was to conduct a review, which encourages professionals, doctors, medical staff and patients to adopt and utilize technologies in order to assist healthcare analytics and improve decision making process in our everyday life. This study has found that most relevant keywords technology to support medical information systems.

Healthcare Data Analytics Platforms and Tools:

Comparing between traditional analytics and advanced analytics, traditional analytics is focusing on business intelligence, operational research and data mining. However, advanced analytics is focusing on descriptive, predictive and optimization (Raden 2010). The Report has come up with different tools and techniques that would improve healthcare data analytics in order to support descriptive, predictive and prescriptive healthcare data analytics the first tool is:

Advanced Data Visualization (ADV): ADV is different from other standards bars and line chart, since it can scale its visualization for millions of data points, also can handle different data types.

Online Analytics Processing (OLAP): It can improve healthcare system by performing statistical calculation very fast through hierarchal and multidimensional organized data, and can increase data integrity checking, quality control and reporting services. OLAP has the ability to improve healthcare decision making system.

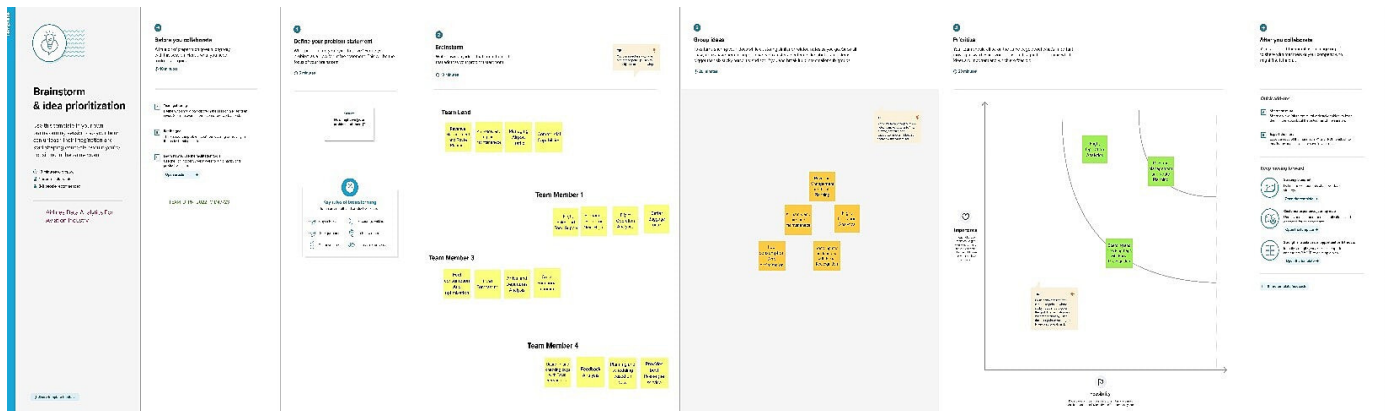
Cassandra File System (CFS): CFS is also distributed system like

HDFS, however CFS is a designated system to perform analytic operation with no single point of failure.

Online Transaction Processing (OLTP): It is similar to OLAP, but it is designated to process patient care operations, such as patient registration, hospital documents and results review.

Empathy Map

Brainstroming:



Problem Statement

- An Unstable Federal Reimbursement Model.
- Awkward Incentive Model.
- Double Customer Services Standard.
- Lack of Transparency in Assigning Hospital
- Lack of Transparency in Selecting Drugs and Medications Used in Hospitals.

PROJECT DESIGN PHASE 1

-

a. Proposed Solution

Proposed SolutionTemplate:

Project team shallfill the followinginformation in proposedsolution template.

S.N o.	Parameter	Description
1.	Problem Statement (Problem to besolved)	<ul style="list-style-type: none">• To perform good data analytics, first of all we should teach individuals how to understand and realize the importance of dealing with such data, for instance how to deal with breast cancer. Believed that whatever and how much our patients are educated and skilled to provide us with the data we expect, medical professionals still highly need to test and clarify this data to consider it and keep it on record.
2.	Idea/ Solution description	<ul style="list-style-type: none">• Predictive analytics supports healthcare sectors to achieve a high level of effective overall care and preventive care, as predictive systems' results allow treatments and actions to be taken when all the risks are recognized in early stages, which aids for minimizing costs.

3.	Novelty / Uniqueness	<ul style="list-style-type: none"> The ultimate benefits of big data analytics include timely responses to current and future market demands, improved planning and strategically aligned decision making, as well as crystal clear comprehension and monitoring of all main performance drivers relevant to the Hospital health care-Data.
----	----------------------	--

5.	Business Model (Revenue Model)	<p>A business model describes the resources, processes, and cost assumptions that an organization makes that will lead to the delivery of a unique value proposition to a customer. As health care organizations are beginning to transform their structure in preparation for a value-based delivery system, understanding business model theory can help in the redesign process.</p>
6.	Scalability of the Solution	<ul style="list-style-type: none"> which can reflect in capturing patient's behaviour and interactions. Another method of using predictive analytics regards how to use applications and software services alongside the electronic clinical records to analyse diagnosis and confirm outcomes in order to provide the correct treatment for the right information from huge databases

Problem Solution Fit:

Solution Architecture:

PROJECT DESIGN PHASE-2

Customer JourneyMap

Customer journey analytics uses machine learning and big data to track and analyze when and through what channels customers interact with an organization, with an aim to influence behavior (e.g., buying behaviors among retail customers). Similarly, healthcare organizations want to influence health-related behaviors, such as taking medication as prescribed and not smoking, to improve outcomes and lower the cost of care. In a partnership with an analytics services provider, a payer organization is leveraging customer journey analytics among healthcare consumers to identify the best opportunities and channels for patient outreach. With this analytics-driven engagement strategy, the payer has found an opportunity to significantly improve patient engagement—a predicted overall increase from 18 percent to 31 percent.

Quantitative research is great for adding in relevant supporting statistics and analytical data, also, it allows you to move past one or two observations/interviews and conduct broader research to get a sense of how the experience of your persona translates on a larger scale. The first step of a customer journey map is to set down the high-level processes a user goes through. These need to be fairly large chunks in the journey, to give you space to dig deeper into each section. Perhaps thinking of them as blocks in a flowchart, can help you break it down into the large sections required, then plot them on a large piece of paper, whiteboard, or use a modeling program. Also, consider at this point the high-level stakeholders that your customer interacts with on their journey. Plot these below and leave space for building on their touch points with the customer.

Typically most designers and developers of applications have some initial understanding of how a user works their way through the application. They've either observed the scenario themselves or received documentation of the typical path a user

takes from documentation or initial reporting. Adding in additional information from qualitative research, such as from an observational or contextual inquiry study, can give more points along the timeline and highlight some critical events.

Solution Requirements

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	Dataset	Upload the dataset to the dashboard
FR-2	Analysis	Data is pre-processed and cleaned. After cleaning the exploration process is carried out
FR-3	Prediction	Machine learning algorithm is used for prediction
FR-4	Visualization	Visualization of the prediction is shown in the dashboard created using IBM Cognos Analytics

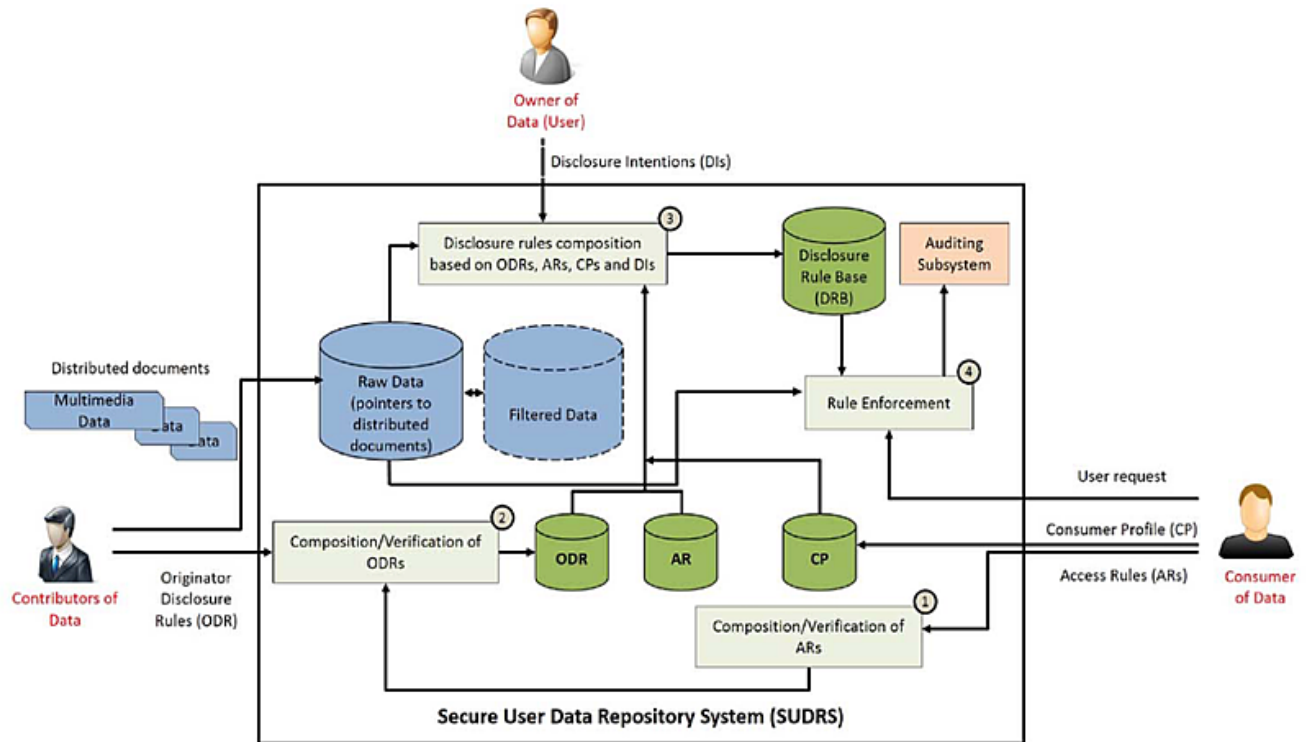
Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Dashboards are created in order to display the length of stay prediction in visual manner. So, the prediction can be easily understood.
NFR-2	Security	The dataset uploaded to the dashboard cannot be downloaded or accessed by external sources.
NFR-3	Reliability	Dashboard created after the prediction process will be more reliable and shows the result clearly and effectively.
NFR-4	Performance	The prediction has more accuracy.
NFR-5	Availability	Predicted data will be available for sometime after the prediction.

Data Flow Diagrams

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



Use Case:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	API and Database Connectivity	USN-1	As an Analyzer, I use Kaggle API To gather the dataset	3	Medium	SABARI RAJA

Sprint-1		USN-2	As an analyzer, I can create database connectivity using IBM Cloud and IBM Cognos Analytics	5	High	VIGNESHWARAN SIRAJ ANWARDEEN
Sprint-1		USN-3	As an analyzer, I can pre-process the data and Explore it.	5	High	SIRAJ ANWARDEEN SABARI RAJA
Sprint-2	Dashboard	USN-4	As an analyzer, I Can add the created visualizations to the dashboard	8	High	SHAKKIF IBRAHIM SIRAJ ANWAERDEEN VIGNESHWARAN
Sprint-3	Report, Story	USN-5	As an analyzer, I can add the create the reports for the given dataset(creating report)	8	High	VIGNESHWARAN SABARI RAJA

		USN-6	As an analyzer, I Can create Story for given dataset	8	High	SIRAJ ANWAERDEEN VIGNESHWARAN
Sprint-4	Documentati on	USN-7	We create our entire project documentati on	10	High	SIRAJ ANWAERDEEN VIGNESHWARAN SHAKKIF IBRAHIM

Sprint	Total Story Points	Duration	Sprint Start Date		Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	13	12 Days	24 Oct 2022	04 Nov 2022			
Sprint-2	8	2 Days	05 Nov 2022	06 Nov 2022			
Sprint-3	16	2 Days	07 Nov 2022	08 Nov 2022			
Sprint-4	10	4 Days	09 Nov 2022	12 Nov 2022			

VELOCITY:

$$AV = \frac{\textit{sprint duration}}{\textit{velocity}} = \frac{20}{10} = 2$$

Average velocity for sprint-1:

$$AV = 13/12 = 1.08$$

Average velocity for sprint-2:

$$AV = 8/2 = 4$$

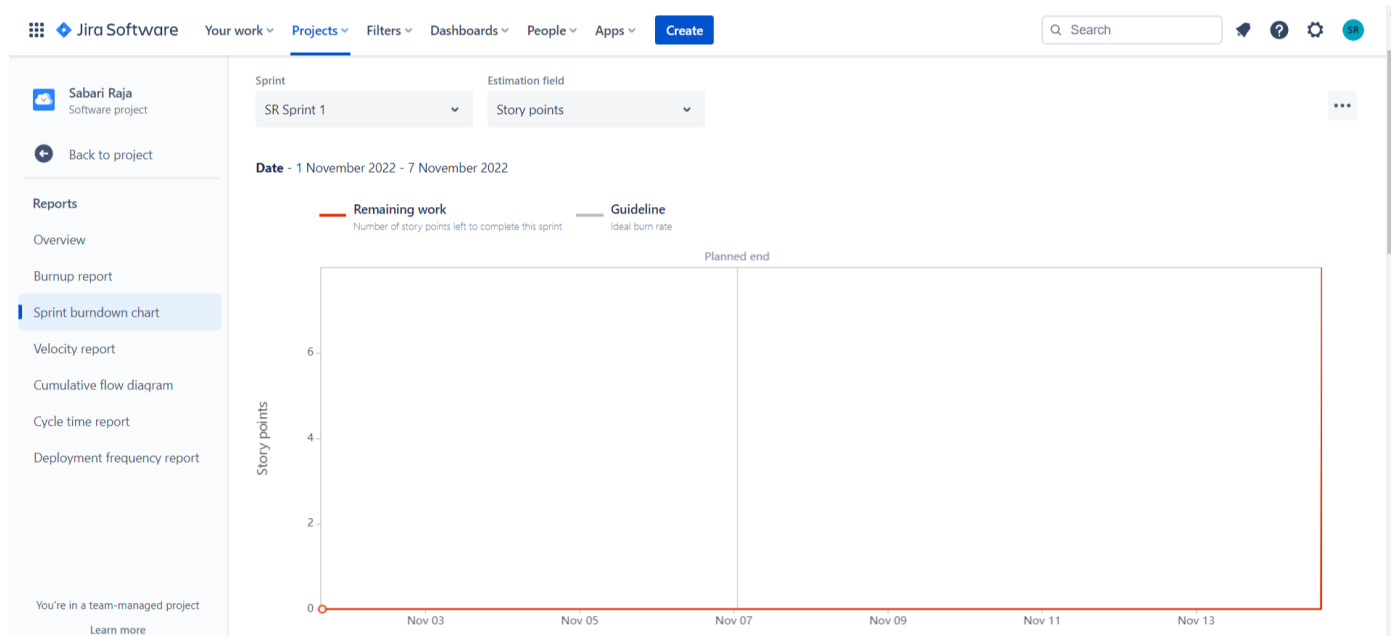
Average velocity for sprint-3:

$$AV = 16/2 = 8$$

Average velocity for sprint-4:

$$AV = 10/4 = 2.5$$

SPRINT BURNDOWN CHART:



TECHNOLOGY STACK

As tumultuous as the current healthcare environment is, it's expected to become even more complex over the next several years. Challenges such as evolving market dynamics, increasing governmental regulation and more demanding consumers will require smarter, more informed decisions from organizations so they can remain competitive and deliver value in their communities. Then, they created a library of custom predictive analytics to identify complex schemes as well as simple billing mistakes. They used both parametric and non-parametric methods for anomaly detection, which included clustering techniques to identify peer groups with normal claims behaviors whose homogeneity has been enhanced not only by specialty designation, but also practice setting, procedure mix fingerprints, geography and other

relevant data-driven factors.

Components & Technologies:

S. No	Component	Description	Technology
1.	User Interface	The user interacts with application using Web UI	HTML, CSS, JavaScript
2.	Data Processing	The data from the dataset is pre-processed	IBM Cognos Analytics
3.	Cloud Database	The clean dataset is stored on IBM Cloud	IBM Cloud
4.	Data visualization	The data is visualized into different forms	IBM Cognos Analytics, python
5.	Prediction	ML algorithms are used for predicting the length of stay	ML algorithms – Fuzzy Logic, Tree Bagger, Random Forest, Decision Tree

Application Characteristics:

S. No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	IBM Cognos Analytics, Python

2.	Security Implementations	Request authentication using Encryptions	Encryptions
3.	Scalable Architecture	Scalability consists of 3-tiers	Web Server – HTML, CSS, Javascript Application Server – Python

S. No	Characteristics	Description	Technology
Database Server – IBM Cloud			
4.	Availability	The application is available for cloud users	IBM Cloud Hosting
5.	Performance	The user can know the prolonged period of stay	ML algorithms

PROJECT PLANING PHASE

JIRA SOFTWARE

Jira Software is part of a product family that helps teams of all kinds to manage their jobs. Jira was originally designed as a tracker for problems and bugs. Today, however, Jira has become a powerful work management tool for all types of applications, from requirements and test case management to agile software. You will learn in this guide what Jira's features and features can help your team with your unique needs.

Key points on Jira:

- JIRA name is a truncation of Gojira (the name for Godzilla in Japanese) that can

be a reference to Bugzilla (a bug tracker and testing tool of Mozilla).

- It is a platform-independent tool; that can be worked with different types of operating systems.
- It is written in the JAVA programming language.

BACKLOG:

The screenshot displays the Jira Software interface for a project named 'Sabari Raja'. The top navigation bar includes 'Jira Software', 'Your work', and various filters and dashboards. A search bar and user profile are on the right. The left sidebar shows project navigation options: 'PLANNING' (Roadmap, Backlog, Board) and 'DEVELOPMENT' (Code, Project pages, Add shortcut, Project settings). The main area shows the 'Backlog' view with a search bar and filters. Three sprints are listed: 'SR Sprint 1', 'SR Sprint 2', and 'SR Sprint 3'. Each sprint contains a single issue: 'SR-3 As an admin, I will analyse the given dataset (Data pre- processing)', 'SR-5 As an admin, I will predict the length of stay (Prediction)', and 'SR-2 USN-4 As a user, I can upload the datasets to the dashboard and view visualizations (Creating dashboard)'. Each issue has a 'TO DO' status and a 'Complete sprint' button.

Does your team need more from Jira? Get a free trial of our Standard plan.

Projects / Sabari Raja

Backlog

Search: [] Filters: SR SI SA VW Epic: [] Insights

SR Sprint 1 1 Nov – 7 Nov (1 issue) Complete sprint

SR-3 As an admin, I will analyse the given dataset (Data pre- processing) TO DO

+ Create issue

SR Sprint 2 1 Nov – 7 Nov (1 issue) Complete sprint

SR-5 As an admin, I will predict the length of stay (Prediction) TO DO

+ Create issue

SR Sprint 3 1 Nov – 7 Nov (1 issue) Complete sprint

SR-2 USN-4 As a user, I can upload the datasets to the dashboard and view visualizations (Creating dashboard) TO DO

BOARD:

Jira Software

Your work

Projects

Filters

Dashboards

People

Apps

Create

Q Search

🔔

?

⚙

👤

Sabari Raja

Software project

PLANNING

Roadmap

Backlog

Board

DEVELOPMENT

Code

Project pages

Add shortcut

Project settings

You're in a team-managed project

Learn more

Does your team need more from Jira? Get a free trial of our Standard plan.

Projects / Sabari Raja

All sprints

SR

YW

👤

Sprint

0 days remaining

Complete sprint

⋮

GROUP BY

None

Insights

TO DO 2 ISSUES

As an admin, I will analyse the given dataset (Data pre-processing)

SR-3

As a user, I can upload the datasets to the dashboard and view visualizations (Creating dashboard)

SR-6

IN PROGRESS

DONE

ROADMAP:

Jira Software

Your work

Projects

Filters

Dashboards

People

Apps

Create

Q Search

🔔

?

⚙

👤

Sabari Raja

Software project

PLANNING

Roadmap

Backlog

Board

Reports

Issues

DEVELOPMENT

Code

Releases

OPERATIONS

Deployments

On-call

You're in a team-managed project

Learn more

Projects / Sabari Raja

Roadmap

SR

YW

SI

SA

👤

👥

Status category

Epic

Give feedback

Share

Export

⋮

View settings

	T	NOV	DEC	JAN '23
Sprints		SR Spri...		
Releases				
SR-17 Analyse				
SR-18 predict				
SR-19 visualization				
SR-20 Dashboard				
+ Create Epic				

Today

Weeks

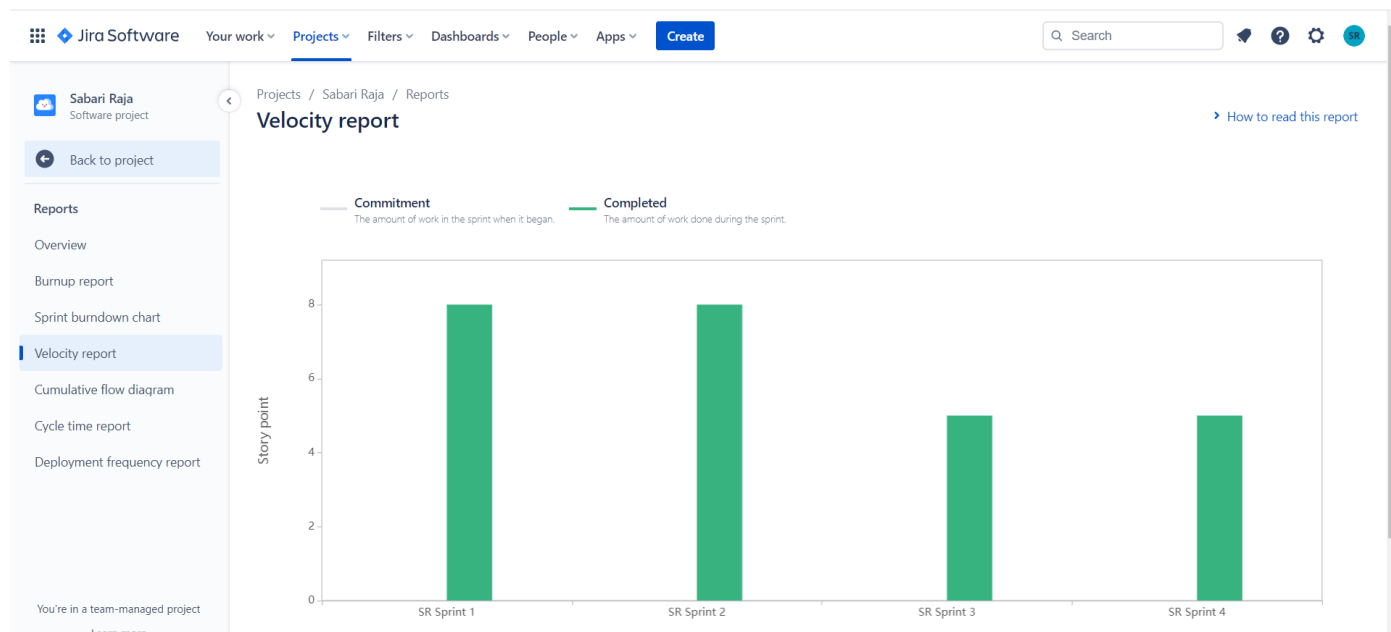
Months

Quarters

↶ ↷

https://labeotechnology.atlassian.net/jira/software/projects/SR/boards/1/reports

VELOCITY REPORT:



MILESTONES	TASKS
MILESTONE-1	COLLECTION OF DATA
MILESTONE-2	UPLOADING THE REQUIRED DATAS ON THE PLATFORM (IBM COGNOS)
MILESTONE-3	EXPLORATION AND VISUALIZATION OF DATA
MILESTONE-4	CREATING THE INTERACTIVE DASHBOARD

MILESTONE-5	DISPLAY THE INSIGHTS IN THE DASHBOARD
MILESTONE-6	PREPARE A STANDARDIZED DATA SET AND USING THE DATA REQUIRED WITH THE HELP OF PYTHON PROGRAM