

PROJECT REPORT

Team ID	PNT2022TMID23570
Project name	Analytics for Hospital Health Data

CHAPTER 1

INTRODUCTION

1.1PROJECT OVERVIEW:

- Data analytics in clinical settings attempts to reduce patient wait times via improved scheduling and staffing, give patients more options when scheduling appointments and receiving treatment, and reduce readmission rates by using population health data to predict which patients are at greatest risk.

1.2 PURPOSE:

- This is the purpose of healthcare data analysis: using data-driven findings to predict and solve a problem before it is too late, but also assessed methods and treatments faster, keep better track of inventory, involve patients more in their own health, and empower them with the tools to do so.

CHAPTER 2

LITERATURE SURVEY

TITLE	AUTHOR	ALGORITHM	ADVANTAGES	DISADVANTAGES
Big Data Analytics in Healthcare Systems	Maria Mohammad Yousef	DATA ANALYTICS	For better treat disease and the diagnosis in the medical, the role of big data is one where it can construct better predictive models using tools with the ability to analyze and process this vast amount of data.	The contents of this research consist of a systematic review of the current state of Big Data technology in health care, but it does not get into consideration the technical details and concerning about the implementation and out comes achieved in each of the studies reviewed.
Big Data Analytics in Healthcare Systems	Lidong Wang, Cheryl Ann Alexander	DATA ANALYTICS	<p>1.It presents the technological progress of big data in healthcare, such as cloud computing &stream processing.</p> <p>2.Data analytics overcomes the limitations of traditional data analytics and will bring revolutions in healthcare.</p>	<p>1.Security and privacy: Traditional privacy and security measures work on small datasets, capability to use the same measures on massive and streaming datasets is possibly a problem, particularly when dealing with patient's health data.</p> <p>2. Data quality: It affects reliable insights from the data and decision-making for patients' healthcare.</p> <p>3.Insufficient real-time processing: Delay in</p>

				processing complex data models can result in patient care with less quality.
BIG DATA ANALYTICS IN HEALTHCARE	Shubham Mehia	DATA ANALYTICS	<p>1. Medical diagnosis – Diagnosis of a disease by the analyzing previous data may help in diagnosing the disease as an earlier stage and thus also reduce complications during treatment.</p> <p>2. Community healthcare – Preventive steps must be taken before hand against the predicted risks of chronic disease among population by making people aware about contagious disease outbreaks.</p> <p>3. Hospital Monitoring – Hospitals can be monitored in real-time that could help government to</p>	<p>1. Quality of insights – The medical healthcare data which is being generated is of poor quality and contains a lot of inconsistencies. So, yielding insights from that data may sometimes results into inadequate insights and misleading suggestions.</p> <p>2. Privacy and Security – It is a serious issue to give access and exposure of patient's data to unauthorized third party such as government agencies, insurance companies.</p>
			ensure optimal service quality.	
Big Data Analytics in Healthcare — A Roadmap for Practical Implementation.	Sohail Imran, Tariq Mahmood, Ahsan Morshed, and Timos Sellis, Fellow, IEEE	DATA ANALYTICS	BDA can lead to competitive advantages, improved operational efficiency, better service, more effective new opportunities.	Granular access control in healthcare enables patients and hospital medical users responsibilities, privileges, rights and roles to be set such that users related to the hospital are given privileges only to their relevant data or functional area of the system. Maintaining the reliability of data and BDA results is another core problem in application of BDA to healthcare

2.1 EXISTING PROBLEMS:

Covid-19 recently One of the most neglected areas to concentrate on has come under scrutiny due to the pandemic: healthcare management. Patient duration of stay is a crucial statistic to monitor and forecast if one wishes to increase the effectiveness of healthcare

management in a hospital, even if there are many use cases for data science in healthcare management.

2.2PROBLEM STATEMENT AND DEFINITION :

We live in the world of advanced technology. It is being used in every field whether it's professional, healthcare, educational or any other field. Healthcare is in the middle of the revolution. Healthcare is using and adopting different ways of information systems to take business operations in clinical care to a new level. Different categories are appearing in the healthcare niche including electronic medical records (EMRs), different software for speciality care in order to deliver chain management system using healthcare data analytics. Different techniques are taken into progress for the advancements of healthcare system by introducing Lean and Six Sigma methods. This makes the system patient-centric, errors free, wastage free and enhancements in patient flow with improving rates of quality. Health data analytics help in making an increase in the availability of the data analytics healthcare information. This help in serving different data analytics and healthcare purposes.

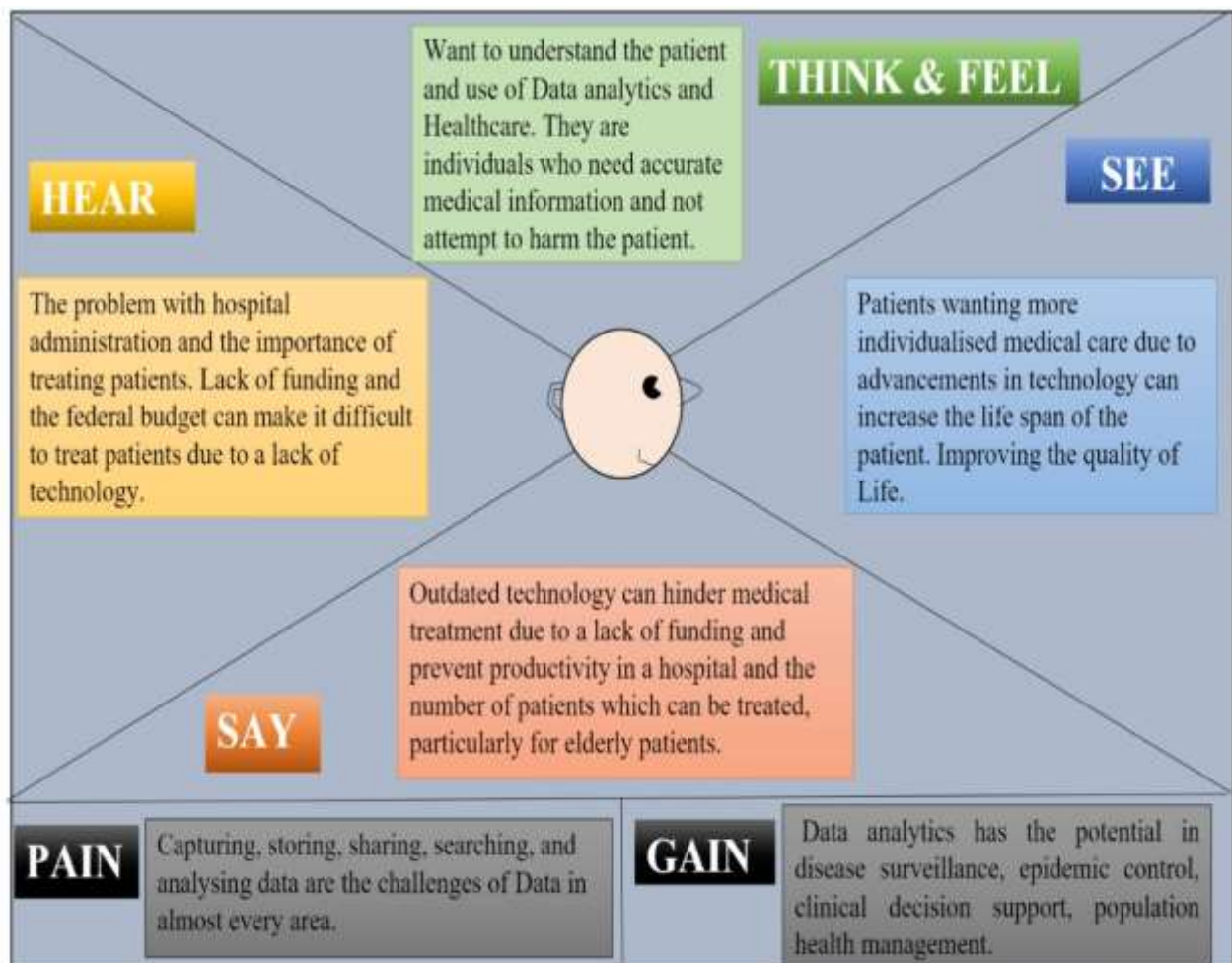
CHAPTER 3

IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS:

- An empathy map is a tool which aids in understanding another person's perspective.
- Empathy maps have up until now not been used in a medical education setting.
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Objective: To assess the attitudes towards, applicability and usefulness of empathy maps as part of medical student's communication skills training.



3.2 IDEATION & BRAINSTORMING:

To try to solve a problem or come up with new ideas by having a discussion that includes all members of a group: to discuss a problem or issue and suggest solutions and ideas.



3.3

3.3 PROPOSED SOLUTION:

- Identify key hurdles to healthcare sustainability in India and propose a set of solutions that mutually benefit and the pharmaceutical industry Pragmatic literature review of 43 articles published by regional and international organizations.
- UNIVERSAL HEALTHCARE COVERAGE Attainment of UHC comes with the hurdle of having to provide care to a higher number of patients.
- EVOLVING DEMOGRAPHICS Population aging has resulted in a growing number of elderly dependents at higher risk of disease and complications.
- RISING COST OF R&D Today, the cost of developing a medicine can exceed USD 2.6 B compared to USD 179 M in the 1970s.
- WIN-WIN SOLUTIONS ARE NEEDED TO ATTAIN SUSTAINABILITY Mutually beneficial solutions that allow for productive movement towards sustainable value-based healthcare systems should be explored.

- **VALUE ADDED SERVICES** The pharmaceutical industry should move beyond the pill and collaborate with to design and offer programs aimed at improving healthcare sustainability e.g., training, administrative support, etc.
- **MULTI-STAKEHOLDER COALITIONS** Multi-stakeholder coalitions can serve as a platform to discuss healthcare challenges and co-create healthcare solutions to achieve defined common goals.
- **INTEGRATED HEALTHCARE MODEL** Investment in integrated healthcare systems that focus on prevention and early diagnosis is key to move towards sustainability in the LA region.

S.NO	PARAMETER	DESCRIPTION
1.	Problem Statement (Problem to be solved)	To accurately predict the Length of Stay for each patient on case-by-case basis so that the Hospitals can use this information for optimal resource allocation and better functioning.
2.	Idea / Solution description	Predictive analytics can create patient journey dashboards and disease trajectories that can lead to effective, and result driven healthcare. It improves treatment delivery, cuts cost, improves efficiencies and so on.

3.	Novelty / Uniqueness	The previously developed data analytics for healthcare produced only the EMR and EHR results. so in this model the details of the patients are added and it can also predict the number of days a patient is going to stay and is also capable of tracking the disease.
4.	Social Impact / Customer Satisfaction	Healthcare data analytics aims at reducing the cost of healthcare operations and processes. Hence, the treatment cost for patients will gradually go down. Not only this, healthcare data analytics has opened the doors to a plethora of job opportunities for qualified and skilled data analytics professionals. These professionals come with data-driven minds and strategic thinking, which is the need of the hour for the global healthcare industry
5.	Business Model (Revenue Model)	The analyses investigate methods of improving the provision of clinical care, enhancing disease prevention, and measuring the effectiveness of various treatment options.

6.	Scalability of the Solution	It does not affect the performance even when the no of patients count got increased during hard times like pandemic. It can even handle large amount of data.
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3.4 PROBLEM SOLUTION FIT:

- The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it solves the customer's problem
- In an age where medical science has made noteworthy advancements, inefficiencies and healthcare errors are still persistent because of the healthcare industry's traditional technology for management.
- One specific area of concern is the exchange of patient data in case of patient transfer from one department or hospital to another. Patient record sharing, when done the traditional way, is time-consuming and inefficient and exposes patient information to a breach.
- To deliver a holistic and satisfactory patient experience, different parties involved in healthcare – doctors, scheme providers, insurance providers, doctors, and patients – should be able to exchange information among themselves securely.

<p>Define CS, fit into CC</p>	<p>1. CUSTOMER SEGMENT(S) CS</p> <ul style="list-style-type: none"> ❖ Patients who are in emergency. ❖ Patients who are in the necessity of resources such as (oxygen cylinders, etc...) 	<p>6. CUSTOMER CONSTRAINTS CC</p> <ul style="list-style-type: none"> ❖ Manipulation of customer records. ❖ Continuous network connections. ❖ Proper maintenance. 	<p>5. AVAILABLE SOLUTIONS AS</p> <ul style="list-style-type: none"> ❖ Analytics for healthcare produced only the EMR and EHR results. ❖ Every record is comprised of one modifiable file, which means that doctors can implement changes over time with no paperwork and no danger of data replication. 	<p>Explore AS, differentiate</p>
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<div>Focus on JBP, the data BE, understand RC</div> <div>2. JOBS-TO-BE-DONE / PROBLEMS JBP</div> <ul style="list-style-type: none"> ❖ To make plan of Resource allocation. ❖ Prediction of LOS. ❖ Make use of/Manage resources effectively during pandemic times. 	<div>9. PROBLEM ROOT CAUSE RC</div> <ul style="list-style-type: none"> ❖ Unoptimized available resources. ❖ Spread of infection to doctors/nurses. 	<div>7. BEHAVIOUR BE</div> <ul style="list-style-type: none"> ❖ To acquire necessary data to analyse the LOS of a patient. ❖ To allocate the necessary resources.
<div>3. TRIGGERS TR</div> <ul style="list-style-type: none"> ❖ Providing optimized treatment. ❖ Accurate updation of available resources. ❖ Reduce the waiting time of the patients incase of emergencies. <div>4. EMOTIONS: BEFORE / AFTER EM</div> <ul style="list-style-type: none"> ❖ Unreliable —> Trustworthy ❖ Negative —> Positive ❖ Insecure —> Secure 	<div>10. YOUR SOLUTION SL</div> <p>To observe and predict the improvement of efficiency of the healthcare management in a hospital and identifying the LOS - risk can have their treatment plan optimized to minimize LOS and lower the chance of staff infection.</p> <ul style="list-style-type: none"> ❖ To get prior knowledge of LOS can aid in logistics such as room and bed allocation planning. ❖ The length of stay is divided into 11 different classes ranging from 0-10 days to more than 100 days. ❖ To predict the Length of Stay for each patient accurately on case by case basis so that the Hospitals can use this information for optimal resource allocation and better functioning. 	<div>8. CHANNELS OF BEHAVIOUR CH</div> <div>8.1 ONLINE</div> <ul style="list-style-type: none"> ❖ Analysis of Data collected. ❖ Accessing Application's features. <div>8.2 OFFLINE</div> <ul style="list-style-type: none"> ❖ Data collection. ❖ Implementing the Suggestions provided by the application.

CHAPTER 4

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration of patient details
FR-2	User Confirmation	Confirmation via OTP
FR-3	Login	Login via cloud storage

4.2 NON-FUNCTIONAL REQUIREMENTS:

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

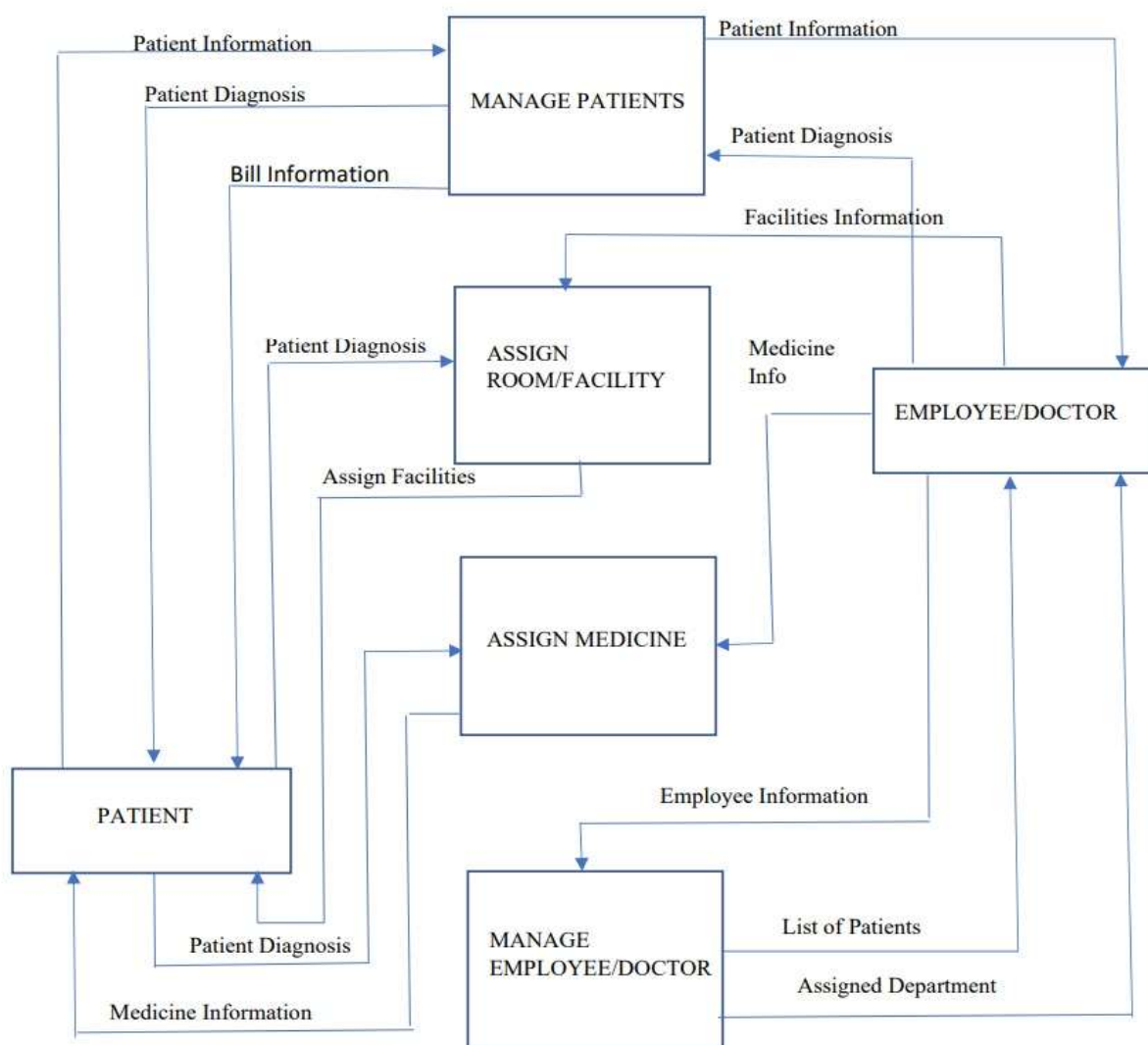
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Data collected from admissions and discharges is used to analyse staff efficiency and productivity during varying patient volumes. This analysis can lead to more efficient use of personnel resources while improving patient care.
NFR-2	Security	The cloud offers nimble disaster recovery, lower up-front costs, and easier expansion – although organizations must be extremely careful about choosing partners that understand the importance of HIPAA and other healthcare-specific compliance and security issues.
NFR-3	Reliability	Data Analytics can provide insight into clinical data and thus facilitate informed decision-making about the diagnosis and treatment of patients, prevention of diseases or others. Data Analytics can also improve the efficiency of healthcare organizations by realizing the data potential.
NFR-4	Performance	Critical medical equipment, such as MRI scanners requires preventative maintenance to ensure proper operation 24/7. Data from sensors in the machines can predict when it's time to replace critical components and prevent sudden, costly breakdowns.
NFR-5	Availability	The details of the patients are added and it can also predict the number of days a patient is going to stay and is also capable of tracking the disease.
NFR-6	Scalability	It does not affect the performance even when the no of patients count got increased during hard times like pandemic .It can even handle large amount of data.

CHAPTER 5

PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS:

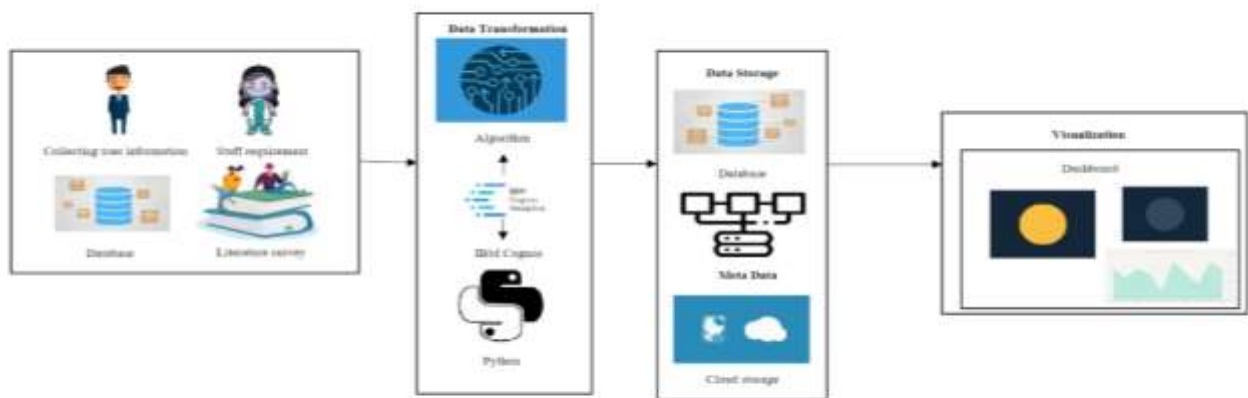
A data flow diagram shows the way information flows through a process or system. It includes data inputs and outputs, data stores, and the various sub processes the data moves through. DFDs are built using standardized symbols and notation to describe various entities and their relationships.



5.2 SOLUTION & TECHNICAL ARCHITECTURE:

Solution Architects are most like project managers, ensuring that all parties, including stakeholders, are on the same page and moving in the right direction at all stages.

Technical architects manage all activities leading to the successful implementation of a new application.



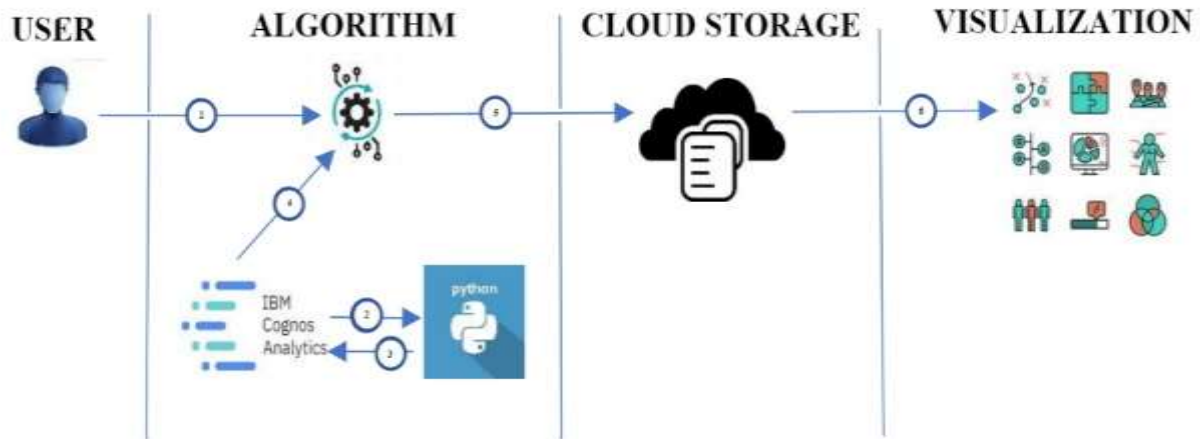
Architecture and data flow of the Hospital Healthcare data using data analytics

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with application using Dashboard	IBM Cognos analytics
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

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks used	IBM Cognos analytics, Python
2.	Security Implementations	Request authentications using encryption	Encryption
3.	Scalable Architecture	Scalability consist of 3 – tiers	Dashboard - IBM Cognos analytics Application server – Python 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



5.3USER STORIES:

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer	Registration	USN-1	As a health care provider I can create account in IBM cloud and the data are collected.	I can create an account and collect data.	High	Sprint-1
		USN-2	As a health care provider all the data that are collected is cleaned and uploaded in the database or IBM cloud.	I can access the cleaned and uploaded data.	Low	Sprint-2
	Login	USN-3	As a health care provider I can log into the dashboard by entering email & password	I can login to the account in my email login.	High	Sprint-2
	Dashboard	USN-4	As a health care provider I can use my account in my dashboard for uploading dataset.	I can login to the account for uploading dataset.	Medium	Sprint-3
Customer (Web user)	Website	USN-5	As a health care provider I can create the database and process the data.	I can create the database and process the data.	Medium	Sprint-3
Visualization	Dashboard	USN-6	As a health care provider I can prepare data for Visualization.	I can prepare data for Visualization.	High	Sprint-3
Presentation	Dashboard	USN-7	As a health care provider I can Present data in my dashboard.	I can present data by using my account in dashboard.	High	Sprint-4
Exploration	Dashboard	USN-8	As a health care provider I can explore Dashboard Story and Report.	I can explore dashboard story and report.	High	Sprint-4

CHAPTER 6

PROJECT PLANNING & SCHEDULING

6.1SPRINT PLANNING & ESTIMATION:

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	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

6.2SPRINT DELIVERY SCHEDULE:

Use the below template to create product backlog and sprint schedule

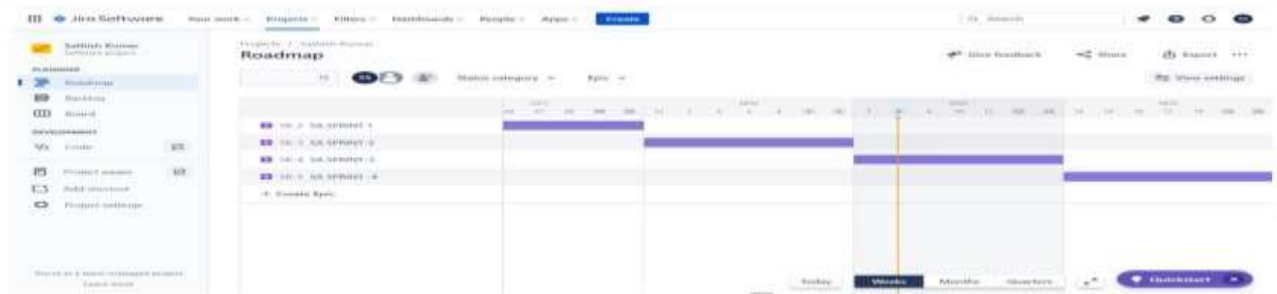
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Member
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	10	High	Vadhanamithraa Sharmila ,Sneekha Induja
Sprint-1	Data uploading	USN-2	As a user, I will be uploading my data into the cognos analytics	10	High	Vadhanamithraa Sharmila ,Sneekha Induja

Sprint-2	Data Analysis	USN-3	As a user, I will be performing analysis on the data for making predictions	5	High	Vadhanamithraa Sharmila ,Sneekha Induja
Sprint-2	Dashboards	USN-4	As a user, I will be making visualizations and interactive dashboards from the data	10	High	Vadhanamithraa Sharmila ,Sneekha Induja
Sprint-3	Story	USN-5	As a user, I will be making stories from the data and the dashboards	20	High	Vadhanamithraa Sharmila ,Sneekha Induja
Sprint-4	Report	USN-6	As a user, I will be making a report from the analysis and dashboards	20	High	Vadhanamithraa Sharmila ,Sneekha Induja

6.3 Reports from JIRA:

Road Map:

A roadmap is a strategic plan that defines a goal or desired outcome and includes the major steps or milestones needed to reach it. It also serves as a communication tool, a high-level document that helps articulate strategic thinking—the why—behind both the goal and the plan for getting there.

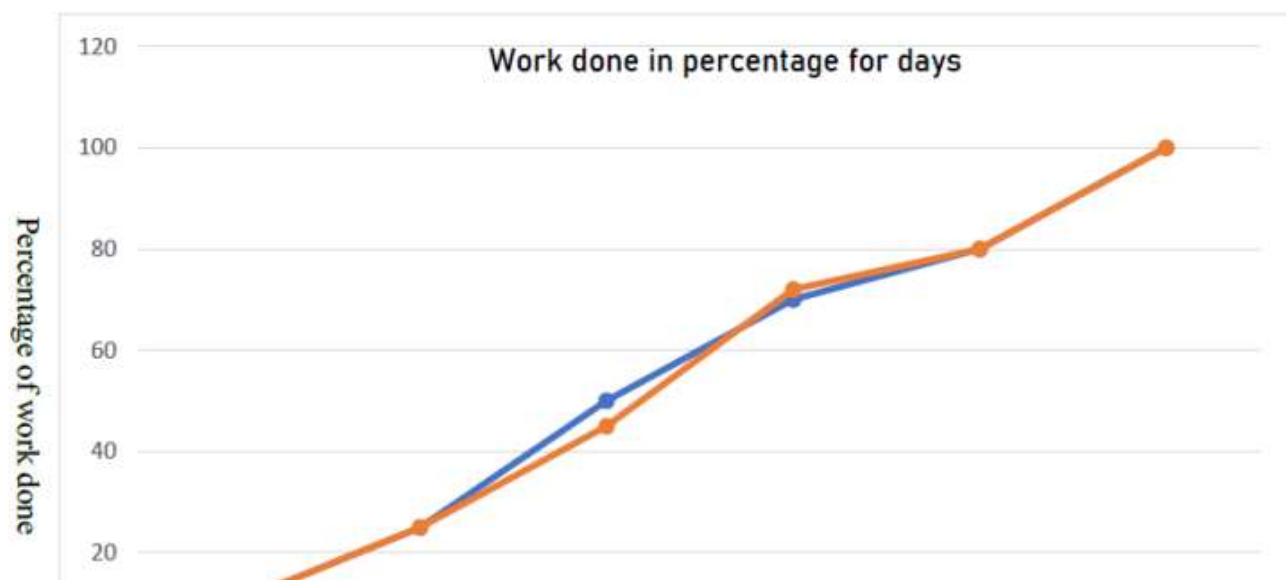


Kanban Board:

A kanban board is an agile project management tool designed to help visualize work, limit work-in-progress, and maximize efficiency (or flow). It can help both agile and DevOps teams establish order in their daily work.

BURNDOWN CHART:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.



VELOCITY

Average velocity for sprint - 1:

$$AV = 8/7 = 1.14$$

Average velocity for sprint - 2:

$$AV = 8/8 = 1$$

Average velocity for sprint - 3:

$$AV = 5/3 = 1.67$$

Average velocity for sprint - 4:

$$AV = 5/4 = 1.25$$

CHAPTER 7

CODING & SOLUTIONING

7.1 Feature 1:

- Fetched the data from DB2 database.
- Creating responsive dashboard.
- Inserting filter for each chart
- Creating report
- Created reports using multiple graphs and charts

Feature 2:

- Creating stories and performed.
- Perform animation render image from website.
- Included graphs and charts.
- Creating web application using bootstrap.
- Embedded the cognos with web application.

7.2 Database Schema:

- case_id
- Hospital_code
- Hospital_type_code
- City_Code_Hospital
- Hospital_region_code
- Available Extra Rooms in Hospital
- Department

- • Ward_Type
- Ward_Facility_Code
- Bed Grade
- Patient id
- City_Code_Patient
- Type of Admission
- Severity of Illness
- Visitors with Patient
- Age
- Admission Deposit
- Stay

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CHAPTER 8

TESTING

8.1 Test Cases:

- Verify user can see home page.
-
- Verify user can see Dashboard page.
- Verify user can navigate to Report page. Verify user can navigate to story page.
- Verify filters are working

8.2 User Acceptance Testing:

1. Purpose of Document

The purpose of this document is to briefly explain the test coverage and open issues of the [ProductName] project at the time of the release to User Acceptance Testing (UAT).

2. Defect Analysis

This report shows the number of resolved or closed bugs at each severity level, and how they were resolved

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
By Design	8	6	0	3	18
Duplicate	1	0	5	0	6
External	0	3	2	1	6
Fixed	13	4	3	16	36
Not Reproduced	0	1	0	0	1
Skipped	0	1	0	1	2
Won't Fix	1	4	2	1	8
Totals	23	18	12	22	75

3. Test Case Analysis

This report shows the number of test cases that have passed, failed, and untested

Section	Total Cases	Not Tested	Fail	Pass
Print Engine	9	0	0	9
Client Application	43	0	0	43
Security	1	0	0	1
Outsource Shipping	1	0	0	1

Exception Reporting	9	0	0	9
Final Report Output	10	0	0	10
Version Control	1	0	0	1

CHAPTER 9

RESULTS

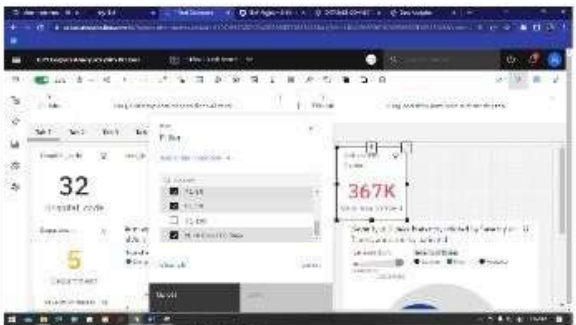
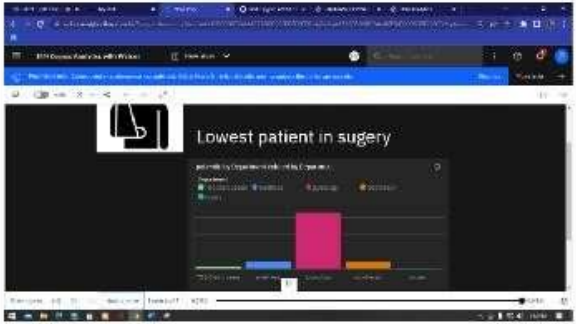
9.1PERFORMANCE METRICS:

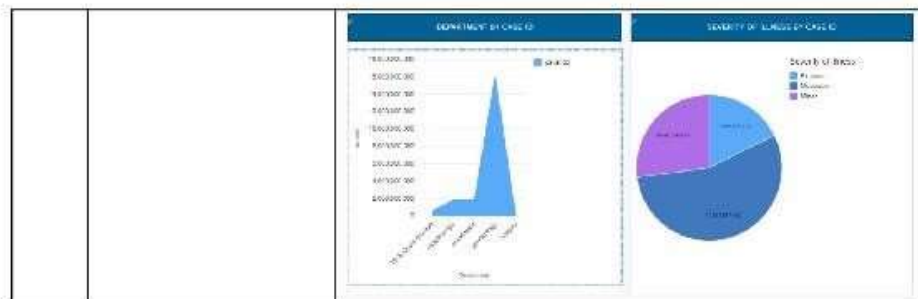
Model Performance Testing:

Project team shall fill the following information in model performance testing template

S.No.	Parameter	Screenshot/Values
1.	Dashboard design	Number of Visualizations / Graphs = 22 Number of tabs = 8 
2.	Data Responsiveness	Data's will dynamically changed and graph also changed. 

3.	Amount Data to Rendered (DB2 Metrics)	Number of rows read = 310400 Number of rows loaded = 318438 Number of rows rejected = 0 
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4.	Utilization of Data Filters	<p>We created filters for Dashboards which is perfectly working.</p>  <p>The screenshot shows a dashboard with several filters on the right side, including 'All', 'By Region', 'By Product', and 'By Date'. On the left, there are two KPI cards: one showing '32' and another showing '5'. On the right, there is a large KPI card showing '367K'.</p>
5.	Effective User Story	<p>Number of Scene Added – 7 Animations are perfectly displayed. Images are perfectly rendered.</p>  <p>The screenshot shows a dashboard titled 'Lowest patient in surgery'. It features a bar chart with three bars in blue, pink, and orange. The chart is labeled 'Lowest patient in surgery' and has a legend on the right side.</p>
6.	Descriptive Reports	<p>Number of Visualizations / Graphs – 6</p>



CHAPTER 10

ADVANTAGES

- Improved research efforts
- Improved health outcomes
- Obtain operational insights
- Improved staffing
- Informed strategic planning
- Higher-Quality Care

DISADVANTAGES:

- Privacy
- Replacing Doctors
- Frustration with poor implementation.
- Cybersecurity risks
- Healthcare Regulatory Changes.
- Healthcare Staffing Shortages

CHAPTER 11

CONCLUSION

- It also means describing how health plans, health care organizations, and clinicians should be accountable to patients and society and conversely. How individuals can
- take appropriate responsibility for their own health. Data analytics is the science of
- analysing raw datasets in order to derive a conclusion regarding the information they hold.
- It enables us to discover patterns in the raw data and draw valuable information from them.

CHAPTER 12

FUTURE SCOPE

- Improved Decision Making: Data Analytics eliminates guesswork and manual tasks. Be it choosing the right content, planning marketing campaigns, or developing products.
- Organizations can use the insights they gain from data analytics to make informed decisions. Thus, leading to better outcomes and customer satisfaction Data analytics
- to achieve business goals of pharmaceutical companies, payers, insurance companies, physicians, hospitals, medical equipment companies, sales reps, and other stakeholders in the healthcare business, need for this have only increased after the Affordable Act came into being.

CHAPTER 13

REFERENCES

- 1 **“Big Data Analytics in Healthcare Systems”**, Maria Mohammad Yousef
- 2 **“Big Data Analytics in Healthcare Systems”**, Lidong Wang, Cheryl Ann Alexander
- 3 **“Big Data Analytics in Healthcare”**-A Roadmap for Practical Implementation. Sohail Imran, Tariq Mahmood, Ahsan Morshed, and Timos Sellis, Fellow, IEEE
- 4 **“BIG DATA ANALYTICS IN HEALTHCARE”**, Shubham Mehla

CHAPTER 14

APPENDICES

Source Code

Dashboard html

```
<!DOCTYPE
html >
  <html lang="en">
    <head>
      <title>Data Analytics</title>
      <meta charset="utf-8">
      <meta name="viewport" content="width=device-width, initial-scale=1">
      <link
                                                                    rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
      <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
      <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
    </head>
    <body>
      <nav class="navbar navbar-inverse ">
```

```
<div class="container-fluid">
```

```
<div class="navbar-header">
```

```
<a class="navbar-brand" href="#">Analytics for Hospitals' Health-Care Data</a>
```

```
</div>
```

```
<ul class="nav navbar-nav">
```

```
<li><a href="index.html">Home</a></li>
```

```
<li class="active"><a href="#">Dashboard</a></li>
```

```
<li><a href="report.html">Report</a></li>
```

```
<li><a href="story.html">Story</a></li>
```

```
</ul>
```

```
</div>
```

```
</nav>
```

```
<div class="container">
```

```
<iframe
```

```
src="https://us1.ca.analytics.ibm.com/bi/?perspective=dashboard&pathRef=.my_folders%2F
```

```
Sprint%2B2%2FFinal%2BDashboard&closeWindowOnLastView=true&ui_appbar=false&ui_n
```

```
avbar=false&shareMode=embedded&action=view&mode=dashboard&subView=model000
```

```
00184774a03ac_00000002"
```

```
width="1500" height="1000" frameborder="0" gesture="media" allow="encrypted-
media" allowfullscreen=""></iframe>

</div>

</body>

</html>
```

Index html

```
<!DOCTYPE
html>

<html lang="en">

  <head>

    <title>Data Analytics</title>

    <meta charset="utf-8">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link                                                                    rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">

    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></scrip
t>

    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></
script>
```

</head>

<body>

<nav class="navbar navbar-inverse">

<div class="container-fluid">

<div class="navbar-header">

Analytics for Hospitals' Health-Care
Data </div>

<ul class="nav navbar-nav">

<li class="active">Home

Dashboard

Report

Story

</div>

</nav>

<div class="jumbotron">

<center> <h4><i>Team ID : PNT2022TMID23570 </i></h4></center>

</div>

<table class="table table-bordered">

<tbody>

<tr>

```
<td>Team Leader</td>

<td>VADHANAMITHRAA D J</td>

</tr>

<tr>

<td>Team member</td>

<td>SHARMILA S</td>

</tr>

<tr>

<td>Team member</td>

<td>SNEKHA A</td>

</tr>

<tr>

<td>Team member</td>

<td>INDUJA R </td>

</tr>

</tbody>

</table>

</body>

</html>
```


Report html

<!DOC TYPE

html>

<html lang="en">

<head>

<title>Data Analytics</title>

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="stylesheet"

href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">

<script

src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>

<script

src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>

</head>

<body>

<nav class="navbar navbar-inverse ">

<div class="container-fluid">

<div class="navbar-header">

Analytics for Hospitals' Health-Care Data

</div>

<ul class="nav navbar-nav">

Home

Dashboard

<li class="active">Report

Story

</div>

</nav>

<div class="container">

<iframe

src="https://us1.ca.analytics.ibm.com/bi/?pathRef=.my_folders%2FReport%2FFinal%2BRepor

t&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode

=embedded&action=edit"

width="1500" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

</br>

```
src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
```

```
<script
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>

</head>

<body>

<nav class="navbar navbar-inverse ">

  <div class="container-fluid">

    <div class="navbar-header">

      <a class="navbar-brand" href="#">Analytics for Hospitals' Health-Care Data</a>

    </div>

    <ul class="nav navbar-nav">

      <li><a href="index.html">Home</a></li>

      <li><a href="dashboard.html">Dashboard</a></li>

      <li><a href="report.html">Report</a></li>

      <li class="active"><a href="#">Story</a></li>

    </ul>

  </div>

</nav>
```

```
<div class="container">

  <iframe

    src="https://us1.ca.analytics.ibm.com/bi/?perspective=story&pathRef=.my_folders%2Fstory%2FNew%2Bstory&closeWindowOnLastView=true&ui_appbar=false&ui_navbar=false&shareMode=embedded&action=view&sceneId=model00000184574031b2_00000002&sceneTime=0"

    width="1500" height="1000" frameborder="0" gesture="media" allow="encrypted-media" allowfullscreen=""></iframe>

  </div>

</body>

</html>
```

GitHub link

<https://github.com/IBM-EPBL/IBM-Project-22905-1659860447>

Project Demo Link

https://drive.google.com/file/d/1dndqVroctxZtmGPk_I7WbbwB5BhGIoQ_/view?usp=share_link

