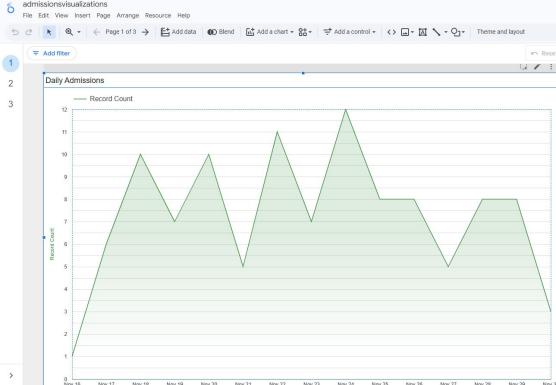


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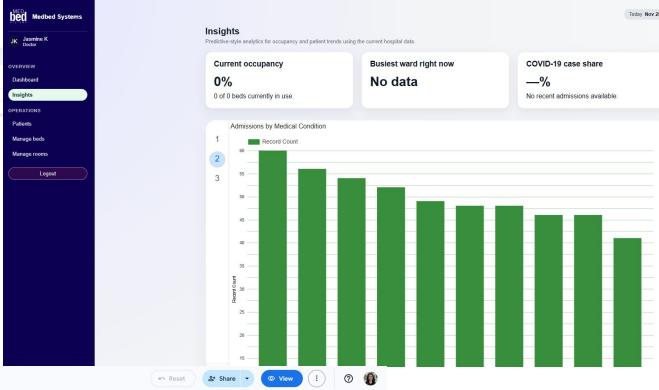
# Progress 5 Presentation



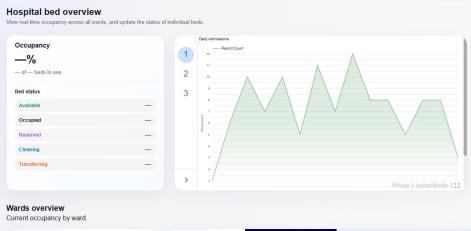
## Insights Page



## Looker Studio



## Dashboard/Home Page



## Front End Changes + Improvements

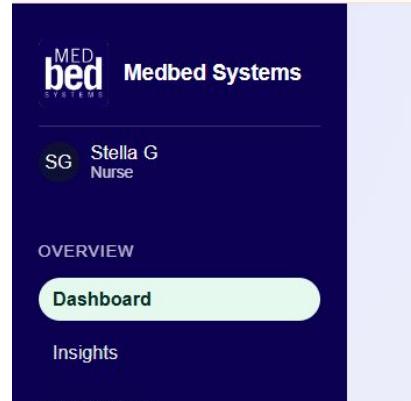
- Updated and refined UI design
- Added additional testing using mock data
- All calculations now update in real time
- Small mock datasets work fully; currently scaling testing to datasets in the hundreds

## Dashboards + Visualizations

- Originally built dashboards in Grafana, but switched to Looker Studio for smoother integration with GCP bucket data
- Three visualizations created:
  - Daily Admissions over the last 2 weeks
  - Admissions by Medical Condition (reason for admittance)
  - Trendline Forecast for predictive analytics
- Interactive Features
  - Direct filtering and interactive clicking on the webpage is limited
  - Users can open the embedded Looker Studio report from the webpage to apply filters and explore predictive analytics/trendline forecasts
  - This allows viewers to analyze patterns in medical conditions across specific dates

# Live User

- Added correct user when logged on
- Created a collection in firebase database using unique ID



The screenshot shows the Google Cloud Firestore console. At the top, there are tabs for 'Panel view' and 'Query builder'. Below is a navigation bar with icons for home, back, forward, and search, followed by the path '3s3RTM71ovU9JmuM2wne5W7o...'. A 'More in Google Cloud' button is also present.

(default)	users	3s3RTM71ovU9JmuM2wne5W7o...
+ Start collection	+ Add document	+ Start collection
users >	3s3RTM71ovU9JmuM2wne5W7o...	
	+ Add field	
		email: "jasmine@gmail.com"
		fullName: "Jasmine K"
		role: "Doctor"

The poster has a blue header with the title 'Hospital Bed Management System' and author information 'Jasmine Kue, Jacob Schorr, Stella Goodrich | Advisor: Sorio Boit'. The main content is organized into several sections:

- Abstract**: Describes the system as a Hospital Bed Management System designed to help hospital management track patient admissions and discharges. It uses a cloud-based architecture with a front-end web application and a back-end API.
- Results/Implementation**: Details the implementation of a RESTful API using Node.js and Express.js, and a front-end application using React.js. It includes sections on User Authentication, Data Model, and Front-End Components.
- Introduction**: Outlines the challenges of managing hospital beds, such as staff availability, patient admissions and discharges through Cloud Run, and maintaining a high level of service quality and reduced quality of care. It highlights the system's features for efficient bed management, real-time monitoring, and reporting.
- Conclusion**: States that the system uses CSV files for data storage, which are processed and imported into MySQL. It also mentions the MyBatis framework for efficient data retrieval and the use of Redis for real-time monitoring and coordination.
- Future Work**: Suggests adding more advanced features like AI-driven bed capacity and staffing decisions.
- Front End**: Shows screenshots of the dashboard, insights, patients, and beds sections.
- Technical Details**: Provides details on Front End Code (React.js), Database (MySQL), Authentication (Email+Password), and Backend (Node.js, Express.js).
- Database**: States that the database is hosted in GCP (Cloud SQL).
- Analytics & Visualization**: Mentions that D3.js is used to create bidirectional visualizations.
- Deployment & Monitoring**: Details the deployment of the system using Docker, Kubernetes, and AWS Lambda.
- Future Work**: Lists potential improvements like real-time access for doctors, mobile app, and AI integration.

# Final Presentation Slides

The screenshot shows a presentation slide titled 'Final Capstone Presentation - Group 5'. The slide contains five numbered items corresponding to the screens in the poster. Item 1 shows the 'MED bed SYSTEMS' logo. Items 2 and 3 show the 'Bed Status' and 'Patient Status' sections of the application. Items 4 and 5 show the 'Add Patient' and 'Add Bed' forms. The slide has a standard presentation layout with a toolbar at the top and a note section at the bottom.

# Final Poster

# Backend 99% Complete

- Database is fully hooked up to frontend
- Data is now “live” and can be updated from Dashboard, data stays changed even after page is closed. (Database in GCP updates and stores it correctly)
- Still having problems with displaying “Patients” csv

**Wards overview**  
Current occupancy by ward.

<b>ICU North</b> 10 beds 2 in use 3 available	<b>General East</b> 25 beds 2 in use 21 available	<b>Isolation South</b> 8 beds 1 in use 3 available
--	--	---

**Update bed status**  
Choose a bed and update its current status.  
 Available

**Bed details**  
Bed number: B203  
Status: Available  
Type: General  
Ward: General East (Floor 1)  
Patient assigned: None

**Patient details**  
Patient ID: None  
Name: No patient assigned  
Admission status: N/A  
Bed status: Available  
Bed type: General  
Ward: General East

All wards				
Bed	Ward	Room	Status	
Bed A101	Ward 1	Room 101	Reserved	
Bed A102	Ward 1	Room 102	Reserved	
Bed A103	Ward 1	Room 103	Reserved	
Bed A104	Ward 1	Room 104	Cleaning	
Bed A105	Ward 1	Room 105	Transferring	
Bed A106	Ward 1	Room 106	Available	
Room	Ward	Building	Floor	Beds
Room 101	ICU North	A	2	1
Room 102	ICU North	A	2	1
Room 103	ICU North	A	2	1
Room 104	ICU North	A	2	1
Room 105	ICU North	A	2	1
Room 106	ICU North	A	2	1
Room 107	ICU North	A	2	1
Room 108	ICU North	A	2	1
Room 109	ICU North	A	2	1
Room 110	ICU North	A	2	1
Room 201	General East	B	1	1
Room 202	General East	B	1	1
Room 203	General East	B	1	1
Room 204	General East	B	1	1
Room 205	General East	B	1	1
Room 206	General East	B	1	1