UA INNOVATE
HACKATHON AND INNOVATION CHALLENGE

Company	HCA Healthcare
Category	Prototype Innovation
Description of Prompt	Your objective is to make a responsive application based on hospital census data for hospital operators to see at-a-glance occupancy, trends, capacity, etc. The application must include alerts and notifications, data sharing capabilities, and customizable views for executives to see the data they need the instant they need it.
Submission Software	Microsoft Teams and either Google or PowerPoint are fine for any presentation.
Suggested Languages/ Frameworks/Tools	The teams can use any technology that they desire.
Midpoint Judging/Check-In	Any schedule for check-ins is fine with us, but we recommend meeting within the first couple of hours after teams have reviewed the dataset to make sure the requirements are clear. We will take an 'office hours' approach as needed by developers.
Submission Expectations	1. Create an interactive application with data from the provided dataset 2. The application should be customizable 3. The application should allow sharing 4. The application should be able to predict occupancy and capacity 5. The application should include configurable alerts based on predicted occupancy and capacity 6. Whenever you use AI during the entire process, state what you used it for, why, and the associated benefit. Show prompts you used and discuss pros and cons of AI's suggestions and outputs.

High-Level Judging Rubric	See table below
Category Judges	4-5 judges from HCA including developers and management will be available to judge and help answer questions.

Rank	Category	Weight	Description	What we're looking for
1 (tie)	Interactive UI & Usability	15%	How intuitive, efficient, and user-friendly the application is.	• Clear navigation and layout • Logical user flows • Responsive performance on desktop and mobile • Helpful tooltips and guidance • Minimal friction for new users
1 (tie)	Predictive Capability	15%	Quality, robustness, and transparency of occupancy and capacity forecasting.	• Clearly defined predictive models • Proper validation (train/test split, cross-validation) • Performance metrics reported • Confidence intervals/uncertainty indicators • Explanation of prediction drivers
3	Customizability	14%	Degree to which users can tailor the application to their needs.	• Adjustable filters and date ranges • Configurable thresholds • Changeable model parameters (if applicable) • Saveable views/presets• Flexible dashboards
4	Data Integration & Correctness	12%	How well the application uses the dataset and whether data handling is accurate, reliable, and reproducible.	• Clean ingestion of dataset • Documented preprocessing steps • Handles missing/duplicate/anomalous values • Reproducible calculations and consistent outputs • Clear explanation of transformations
5 (tie)	Sharing & Collaboration	10%	How easily users can share insights or collaborate.	• Shareable links • Export options (PDF, CSV, etc.) • Role-based access controls

				• Snapshot/versioning capability
5 (tie)	Configurable Alerts	10%	Ability to notify users when predicted occupancy or capacity thresholds are reached.	• User-configurable thresholds • Multiple notification channels • Clear alert logic • Alert fatigue prevention
7	Security & Access Control	8%	How well the application protects data and controls user access.	• Role-based access control • Secure authentication • Protected share links • Data privacy considerations
8	Documentation & Testing	6%	Whether the application is sustainable, understandable, and maintainable.	• Clear user documentation • Admin/technical documentation • Testing procedures • Clear setup instructions
9 (tie)	AI Usage Disclosure & Transparency	5%	Responsible and transparent use of AI throughout the project.	• Clear documentation of AI used, why it was used, benefits gained • Prompts shown • Pros and cons of outputs • Evidence of human review • Risk mitigation steps
9 (tie)	Overall Presentation & Polish	5%	Professional quality and refinement of the final product.	• Consistent visual design • Clean typography and spacing • Speaking command and presence