

AI as an Assistant:

Empowering Patients and Healthcare Practitioners
for
Enhanced Self-Management and Improved Clinical
Outcomes

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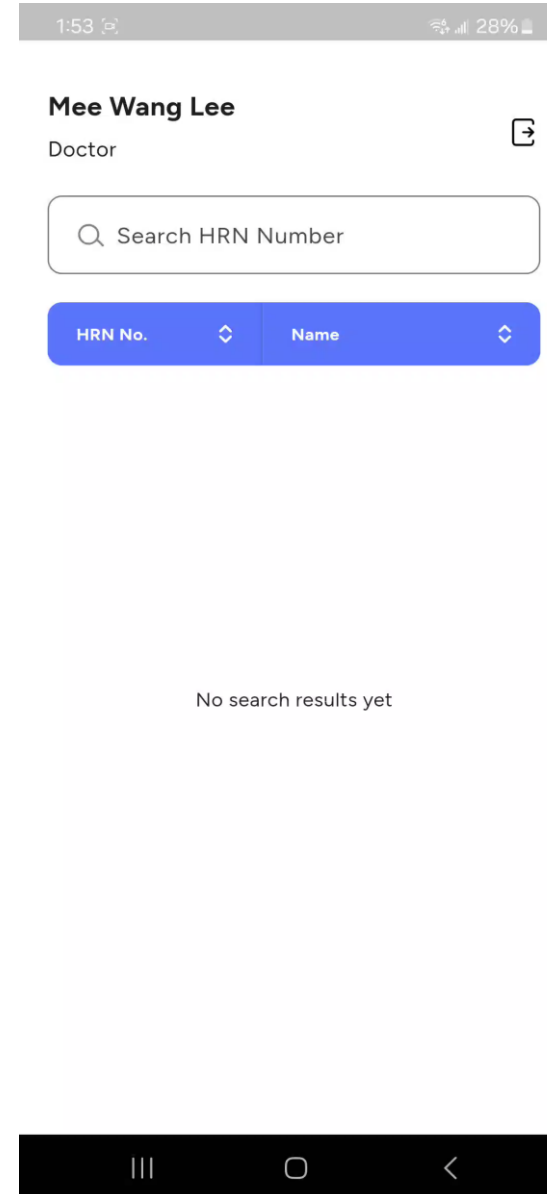
TMPL Corporate Video




Smart Inventory Identification System (SIIS)

POC

- **Problem statement:** Manual input of item code, or barcoding each item is labour intensive.
- **App functionalities:**
 - Search for Patient by HRN
 - View current charges
 - Camera and Gallery integration
 - Add items by Item Code (Alternative entry method)
 - Item Cart page
- **Method:**
 - Classified 11 unique labels (items)
 - 1,100 images used
 - Performed transfer learning on pre-trained Deep Learning model.
 - Automated Hyperparameter Tuning
- **Final results:** Model Test Accuracy of 99.09%



The screenshot shows the app's main interface. At the top, a status bar displays the time 1:53, signal strength, and 28% battery. Below this, the user profile for 'Mee Wang Lee' is shown as a 'Doctor' with a share icon. A search bar labeled 'Search HRN Number' is present. Below the search bar is a table with two columns: 'HRN No.' and 'Name', both with dropdown arrows. The table is currently empty, with the text 'No search results yet' displayed below it. At the bottom, there is a navigation bar with three icons: a list icon, a home icon, and a back arrow.




Remidio – Handheld Fundus Camera (Retinal Screening)





Milkiway – Health Screening Reports



Contents

- Recommendation
- Medical History
- Biometrics
 - > BMI
 - > Blood Pressure
- Body Systems
 - > Physical Exam
 - > Lab Results
 - > Imaging Results
- SFL Eligibility

Zhou [REDACTED] Z [REDACTED]

59 Chinese Female

No Drug Allergy

Recommendations

⊕
Blood Pressure Control

Your blood pressure is elevated. It is advised that you monitor your blood pressure at home, 2-3x weekly.

⊕
Cholesterol Control

The LDL cholesterol is not optimized for a known diabetic (Diabetes is high risk for Coronary Artery Disease in the next 10 years). Do speak to your doctor about increasing the dose of the cholesterol lowering medication. The goal is for LDL cholesterol to be 100mg/dL (2.6 mmol/L).

⊕
Blood Sugar Control

Known Diabetic. You are advised to continue with your current medication and follow-up regularly with your doctor.

Past Medical History

Please provide this report to your primary care doctor (Family Medicine or Polyclinic) so they can continue to follow up on your existing conditions.

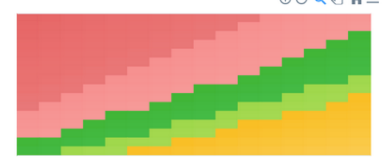
DISEASE	MEDICATIONS	ON FOLLOW-UP WITH POLYCLINIC
High blood pressure	PO Atenolol	<input checked="" type="checkbox"/>
High cholesterol	PO Atorvastatin	<input checked="" type="checkbox"/>
Diabetes	PO Metformin 500mg BD	<input checked="" type="checkbox"/>

Biometrics

Body Mass Index (BMI)

Your Body Mass Index (BMI) category is **Overweight**. BMI is used by the doctors to assess your risk for diseases like high blood pressure, high cholesterol, and diabetes. The recommended BMI is 23 based on World Health Organization's guidelines.

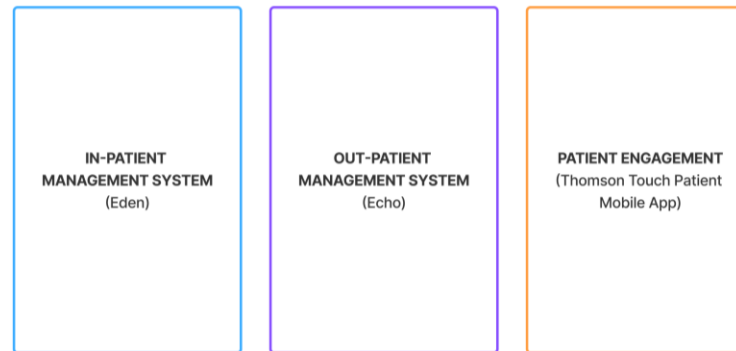
HEIGHT (CM)	WEIGHT (KG)	BMI (KG/M2)	BMI CATEGORY
165	80	29.38	Overweight



*Sample report from Milkiway website

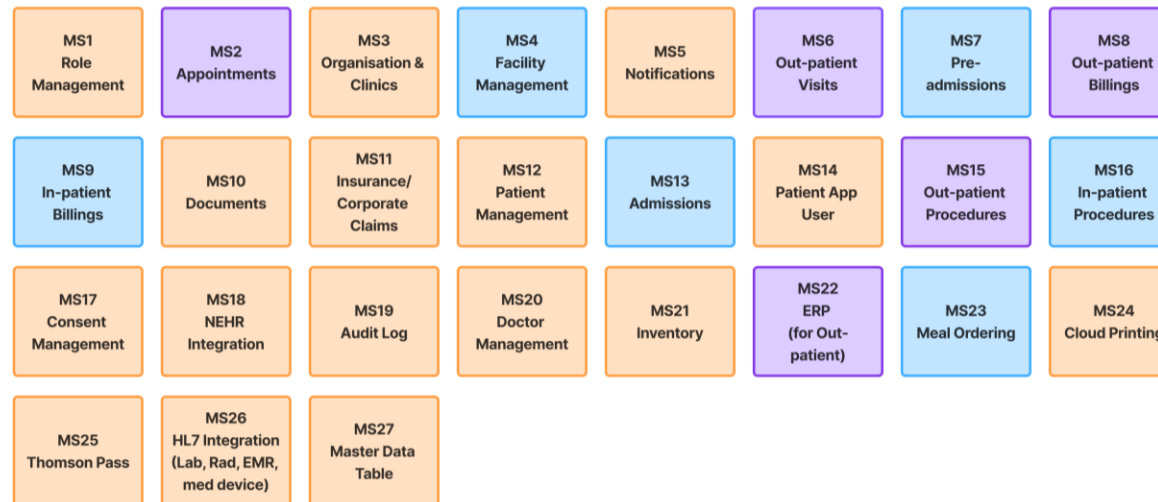
Project Eiffel – building Enterprise Healthcare Management System

SYSTEMS

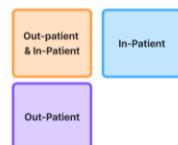


- Micro-services architecture
- Cloud
- In-patient & Out-patient management
- Building in-house

MICROSERVICES



KEY



The Moments That Matter



END OF PRESENTATION

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