

AI4MY: Asean AI Code Fest: Buildathon

**Problem Statement** 

## 1. Challenge Title

# Healthcare Reimagined: Building the Future of Malaysian Health

## 2. The Challenge: A New Lens on Age-Old Problems

For generations, healthcare systems have been built on established processes. But today, we stand at a pivotal moment. The rise of Generative AI gives us a once-in-a-generation opportunity to look at these age-old systems through a new lens—one free from the baggage of "how it's always been done."

This build-a-thon is a call to action. We are not just looking for incremental improvements; we are looking for revolutionary ideas. Your challenge is to **build a working Al-powered software prototype** that fundamentally reimagines a core aspect of the Malaysian healthcare experience.

We want you to look at these complex problems with fresh eyes and the most powerful tools available to spark a new path forward.

## Challenge Tracks

To succeed, your solution **must address one of the following core tracks**, which are derived from key friction areas identified by the Malaysian Ministry of Health (MoH). While these tracks provide direction, you have creative freedom in how you solve the problem. Your solution should be a "concept car"—bold and visionary, yet functional enough to prove its potential.

#### Track 1: The Supercharged Clinician

- The Problem: Clinicians, especially in public health, are heroes on the brink of burnout. They are drowning in administrative tasks, duplicate data entry, and an overwhelming flood of information from disparate sources (patient histories, lab results, real-time vitals, handwritten notes). This administrative burden steals precious time from what matters most: patient care and critical decision-making under high-stress situations.
- **Your Mission:** Build a solution that gives clinicians superpowers. Reimagine their workflow to automate tedious tasks, synthesize complex patient data into actionable insights, and dramatically reduce their cognitive load.

#### Track 2: The Seamless Patient Journey

• The Problem: For a patient, navigating the healthcare system can be a confusing, anxious, and disjointed experience. From finding the right clinic and scheduling appointments to physically navigating a large hospital and understanding the next steps

- in their care plan ("mental wayfaring"), the journey is fragmented and stressful, especially when they are already feeling unwell.
- **Your Mission:** Build a solution that creates a seamless, intuitive, and empowering journey for patients. Reimagine how patients interact with the healthcare system, making it proactive, personalized, and profoundly simple.

#### Track 3: The Proactive Public Health Shield

- The Problem: Public health officials often operate in a reactive mode, responding to
  outbreaks and health crises after they've already begun. They struggle to quickly gather,
  verify, and analyze information from vast public sources (social media, news, community
  reports) to spot emerging threats, counter misinformation, and deploy a targeted,
  effective response before the situation escalates.
- Your Mission: Build an early warning and response system that acts as a proactive shield for public health. Reimagine how we can harness collective intelligence and AI to move from reaction to prediction, protecting the community at scale.

### 3. The Big Picture: From Prototype to National Impact

**This is more than a competition.** The solutions you build in 48 hours will be showcased to an exclusive audience of senior officials from the Ministry of Health and digital leaders, with the ultimate prize being an opportunity to demo your solution **ON STAGE at the ASEAN AI Summit.** The goal is to identify tangible, innovative solutions that the government can evaluate for further development and real-world pilot programs.

A successful prototype from this build-a-thon could become the seed for a larger platform that transforms public health in Malaysia. You are not just building an app; you are demonstrating a new future for how the public and private sectors can collaborate to solve our nation's most pressing challenges.

## 4. Personas: The People We're Building For

To help you, think about the real people affected by these problems:

- Dr. Aisha (The Clinician): A dedicated doctor in a busy public hospital. She loves her
  patients but spends nearly half her day on paperwork and trying to piece together
  information from three different systems. She worries that one day, amidst the chaos,
  she'll miss a critical detail.
- **Uncle Tan (The Patient):** A 68-year-old man managing a chronic condition. He gets confused about which specialist to see next and has missed appointments because he got lost in the hospital building. He feels like a number in a system he can't understand.
- **Siti (The Analyst):** A sharp data analyst at the Ministry of Health. During the last dengue scare, she spent weeks manually sifting through social media rumors and news reports

to understand the outbreak's true scale, knowing a faster, automated system could have saved lives.

## 5. Expected Outcome & Deliverables

Your team must deliver a high-fidelity solution that is close to a production-ready "alpha" version.

• Core Deliverable: A working software prototype that is deployed and accessible via a public URL.

#### Key Components:

- An impressive and intuitive User Interface (UI) that clearly demonstrates the "wow" factor of your solution (e.g., stunning dashboards, voice integration, and remastered AI UX).
- A **functional backend** that performs the core logic of your solution.
- o A live, 5-minute pitch & demo showcasing your solution to the judges.
- A 30 sec 1 min video demo showcasing your solution for the judges.
- A public **Git repository** containing all your source code and a README.md file explaining your project and how to run it.

## 6. Judging Criteria & Scoring

Your project will be judged out of 100 points, with a strong emphasis on the quality of the user experience and the impact of the solution.

#### 1. Solution Impact & Vision (35 points / 35% of total):

- How effectively and creatively does the solution address a core pain point within the chosen track?
- Is the value proposition obvious and compelling for the end-user (e.g., the clinician, patient, or analyst)?
- o Is the vision for this solution ambitious and inspiring?

#### 2. User Experience (UX) & Design (30 points / 30% of total):

- How visually impressive, polished, and intuitive is the user interface? (This is a major focus).
- Ones the solution have a "wow" factor that makes it memorable?
- o Is the user journey seamless and easy to understand?

#### 3. Technical Implementation & Functionality (25 points / 25% of total):

- Does the prototype work as demonstrated? Is the core functionality robust?
- Is the technical approach innovative and well-executed?
- O How well is the AI integrated to create a truly "intelligent" application?

#### 4. Pitch & Storytelling (10 points / 10% of total):

- How clearly and persuasively did the team communicate the problem, solution, and vision?
- Was the live demo effective and compelling?

## 7. Constraints & Resources

- Technology Stack: You are free to use any technology stack you choose.
- Data: Teams will be responsible for creating, scraping, or simulating their own data. No official datasets will be provided.
- APIs & Tools: We recommend leveraging modern AI APIs and low-code/UI-building tools to accelerate your development. We will provide a list of recommended tools and potential credits closer to the date.
- Call to Action: The challenge is to BUILD a solution. This is a Build-a-thon.