SMART INDIAN HACKATHON 2023.

Ministry/Organization Name/Student Innovation:
International Council For Circular Economy (ICCE).

PS Code: SIH1383

Problem Statement Title: Optimizing Doctor Availability And Appointment Allocation In Hospitals.

Team Name: Full Stack Fighters.

Team Leader Name: P. V. Kartikeya Pavana Suchindra.

Institute Code(AISHE):

Institute Name: JB Institute Of Engineering And Technology.

Theme Name: HealthTech

Our ideas/approach:

1.Improved efficiency : Using **AI** to analyse appointment data, patient preferences and doctor schedules for **reducing wait time**.

2.Enhanced patient experience: **Patients can easily book appointments**, receive timely reminders and access their medical records for a **more convenient experience**.
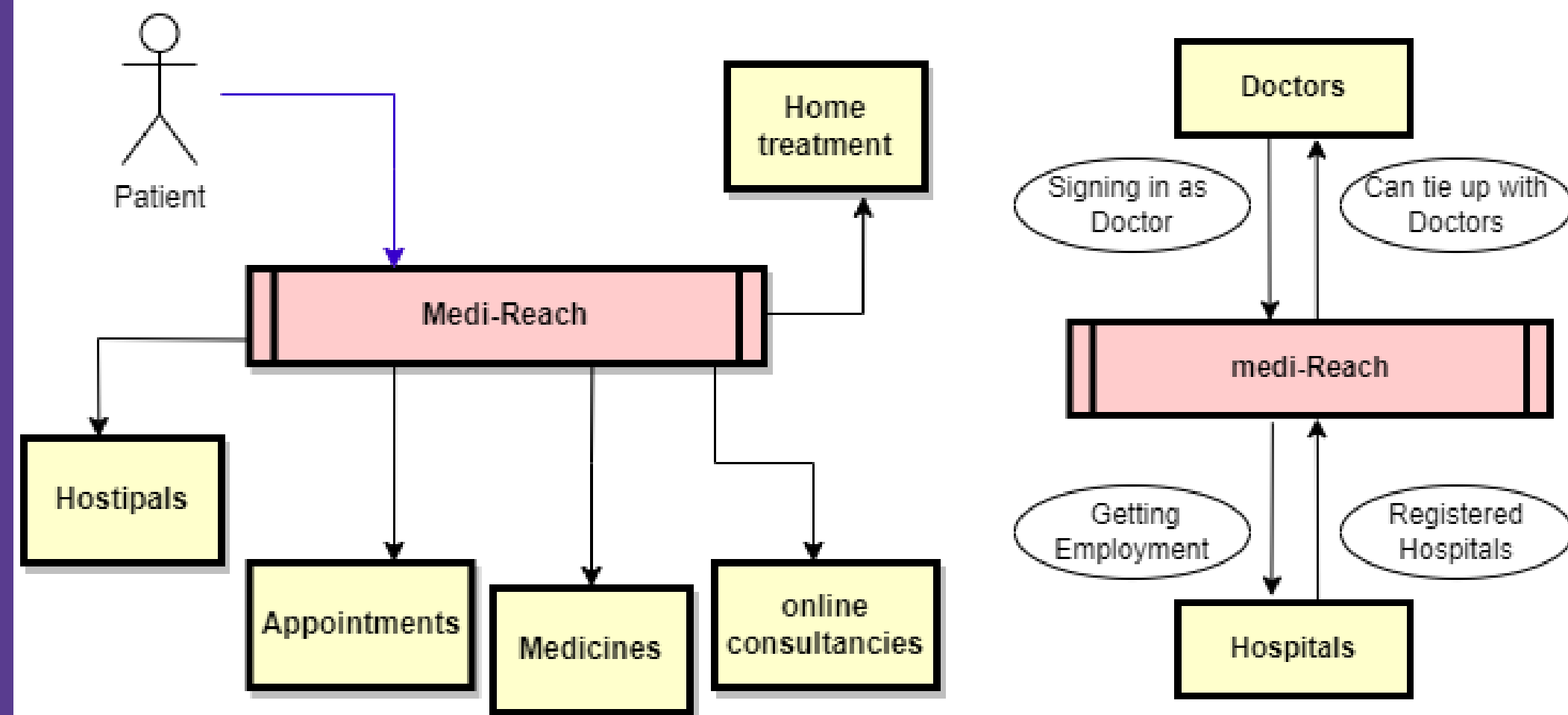
3.Better resource management : Resources can be allocated **more effectively** by matching doctor's availability with patient demand.

4.Reduced administrative burden : Administrative staff can focus more on **value-added tasks** rather than appointment scheduling and management tasks.

5.Increased accessibility : It allows patients to access healthcare services **remotely increasing accessibility**.

6.Data-driven decision-making : **AI provides valuable insights** helping hospitals make informed decisions and resource allocation.

Technology stack:

7. Reduced no-shows : **AI sends automated reminders and confirmations to patients**, reducing the number of missed appointments and improving overall appointment constancy.

8. Cost savings : checking doctor's availability and appointment scheduling can lead to cost savings and **reduce administrative overhead**.

9. Scalability : **Digital technology** and **AI can scale accommodate** the needs of large healthcare systems, making it easier to manage appointments.

10. Health monitoring : Remote monitoring can enable continuous **health tracking**, allowing doctors to provide **more proactive care.**

11. Reduced paperwork : going digital reduces the paperwork associated with appointment scheduling and medical recordkeeping, making health operations more environment friendly.

12. Enhanced accuracy : **AI algorithms** can prevent scheduling errors, ensuring patients see the right specialists and **reducing the risk of medical mistakes**.

Show Stoppers

1.Insurance availability : **AI analyses the insurance data** provided by the customer and provides us with information on whether the policy is applicable at the hospital before booking an appointment. It allows the individuals to understand their **insurance coverage** and showing the availability of an insurance policy before booking a medical appointment empowers individuals to make informed decisions about their healthcare, ensuring they receive appropriate coverage and **reducing the potential for financial surprises**.

2. Doctors to hospitals : **Providing employment** for temporarily unemployed doctors, physicians by collaborating with various hospitals which need substitutes.

3. Home healthcare : Home healthcare eliminates the need for **patients with chronic disorders** to travel to a medical facility and doctors can provide more individualized care in patient's home environment. Home healthcare can **reduce the exposure to infectious diseases during disease outbreaks** and provide patient-centered care.

4. Medication delivery : Our app pave a way to buy any **medication delivery facility** from various nearby pharmacies with comfortable discounts and offers.

Team Member Details:

Team Leader Name: **P V Kartikeya Pavana Suchindra**

Branch : B-tech   **Stream :** CSE(AIML)   **Year** : II

Team Member 1 Name: **Riddhi Pyata**

Branch : B-tech   **Stream :** CSE(AIML)   **Year :** II

Team Member 2 Name: **Jangapally Avinash Vardhan**

Branch : B-tech   **Stream :** CSE(AIML)   **Year :** II

Team Member 3Name: **Kondan Sreenidhi**

Branch : B-tech   **Stream :** CSE(AIML)   **Year :** II

Team Member 4 Name: **Suryapakula Sudheer Kumar**

Branch : B-tech   **Stream :** CSE(AIML)   **Year :** II

Team Member 5 Name: **Sandeep Nidamaluri**

Branch : B-tech   **Stream :** CSE(AIML)   **Year :** II

Team Mentor 1 Name: **Type Your Name Here**

Category (Academic/Industry):   Expertise (AI/ML/Blockchain etc): Domain Experience (in years):

Team Mentor 2 Name: **Type Your Name Here**

Category (Academic/Industry):   Expertise (AI/ML/Blockchain etc): Domain Experience (in years):