🦎 IguanaLogix – Project Plan

# 1. 🔍 Project Overview

IguanaLogix is an AI-powered message assistant and team collaboration platform built on Iguana X. It enables healthcare staff to:  
- View real-time HL7/FHIR messages  
- Get plain-language AI-generated summaries  
- Instantly chat or live poll team members  
- Create and assign tickets to the appropriate department  
- (Stretch Goal) Schedule patients and tasks  
It bridges integration, automation, and communication — all from within one seamless interface.

# 2. 🧠 Core Features

- HL7/FHIR Message Ingestion via Iguana X

- AI-Powered Summary + Explanation using OpenAI API

- Live Chat + Polling System (React + Firebase)

- Ticket Delegation System with department assignment

- (Stretch) Patient Scheduling for Admins

# 3. 👥 User Stories

|  |  |
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| Role | User Story |
| Nurse | I want to read plain-language summaries of HL7 messages to triage faster. |
| Admin | I want to assign urgent messages to the right department for follow-up. |
| Lab Tech | I want to use AI to explain HL7 segments I’m unfamiliar with. |
| Clinician | I want to participate in real-time chats and polls on high-priority items. |
| Developer | I want to inspect Iguana logs and see which messages triggered tickets. |
| Admin (Scheduling) | I want to schedule patients and manage upcoming appointments. |

# 4. 🔁 Workflow Summary

[ HL7 Message Received via Iguana X ]  
 ↓  
[ Parsed + Logged in Iguana Translator ]  
 ↓  
[ Sent to OpenAI for Summary ]  
 ↓  
[ Displayed in React UI ]  
 ↓  
[ User Options: Chat | Poll | Assign Ticket | Schedule Patient ]  
 ↓  
[ Ticket Routed + Appointment Created + Logged ]

# 5. 📐 Wireframe Plan (Low Fidelity)

- Dashboard: message list, AI summary, actions

- Chat + Poll View: real-time chat and polling

- Ticket View: assignment drawer or modal

- Scheduling View: appointment calendar, patient form

- (Optional) Admin Panel: logs, analytics, ticket audit

# 6. ⏱️ Timeline & Phases

* Day 1: Setup Iguana X channel + mock HL7 messages
* Day 2: Lua Translator for logging + summary calls to OpenAI
* Day 3: Build React UI: message dashboard + AI viewer
* Day 4: Add live chat & polling component
* Day 5: Create ticket delegation modal + routing logic
* Day 6: Build scheduling feature: appointment creation + display
* Day 7: Polish, document, record demo, prep for interview

# 7. 🌟 Stretch Goals

- Auto department detection via OpenAI

- Role-based UI access

- Exportable logs or ticket reports

- Voice summary (text-to-speech)

- Dark mode toggle

- Appointment Scheduling for patients

- Conflict detection + reminders

# 8. 📎 Appendix

- Sample HL7 messages used

- OpenAI prompts and outputs

- Screenshots or videos of UI interactions

- GitHub repo link + deployment URL (if hosted)