IntelliConsult

Software Engineering - (IT314)
Prof - Saurabh Tiwari

Group 1

202301027 PATEL OM PIYUSHBHAI (Group Leader)
202301037 BHAVYA SHAILESH BODA
202301010 VARSHIL JAYESHBHAI PATEL
202301005 ARYAN PATEL
202301044 SANGHANI KAVY MANISHBHAI
202301054 MANAV KALAVADIYA
202301060 NEERAJ VANIA
202301059 SHRADDHA RATHOD
202301046 DHRUV MALANI
202301001 VED KOTADIYA
202301013 PARMAR SMIT HARISHBHAI

Functional Requirements:

FR-01: User Authentication

- **Elicitation Technique:** Analysis of Existing Systems & Prototyping
- **Justification:** A login feature is standard; everyone expects it. We start by using Analysis of Existing Systems, which just means we look at how other good, secure apps handle logins. This shows us what works well and what users are used to. Then, we use Prototyping to build a simple, clickable demo of our login page. We show this to patients and doctors to get their feedback and make sure our process is easy, safe, and trustworthy for them.

FR-02: Doctor Authentication by Admin

- **Elicitation Technique:** Stakeholder Analysis
- **Justification:** As the owners of this project, we used Stakeholder Analysis by looking at our own goals for the app. We decided that user trust and safety is our number one priority. The biggest risk to that trust would be a fake doctor getting onto the platform. Therefore, we made it a core rule that an admin (one of us) must manually check and approve every doctor to ensure everyone on our platform is legitimate.

FR-03: Doctor Discovery

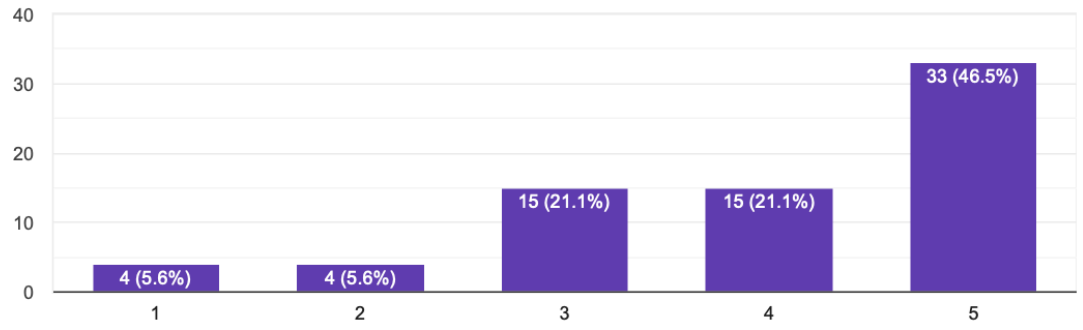
- **Elicitation Technique:** Brainstorming & Google Form Surveys
- **Justification:** To create a useful search feature, we first held a Brainstorming session to list all the possible ways a patient might want to filter doctors (specialty, language, etc.). Then, we put these options into a Google Form Survey and asked potential users to rank which filters are most important to them.

On a scale of 1 to 5, please rate how important the following features would be for you in a healthcare platform.

Copy chart

Easily search for doctors by speciality

71 responses

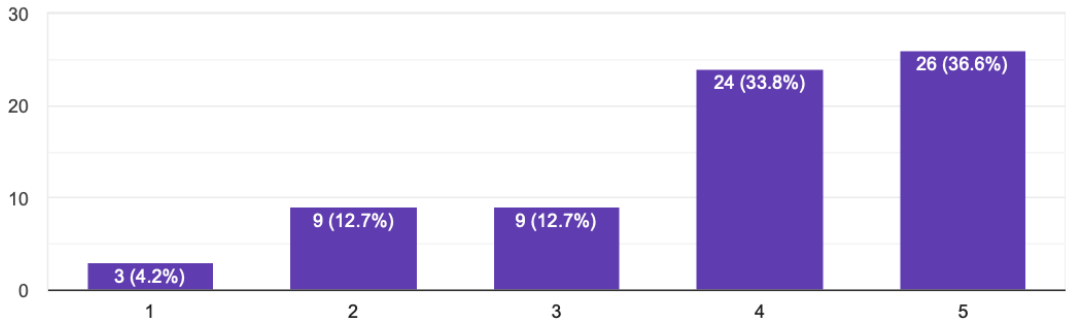


On a scale of 1 to 5, please rate how important the following features would be for you in a healthcare platform.

Copy chart

Filter doctors by availability, consultation fee

71 responses



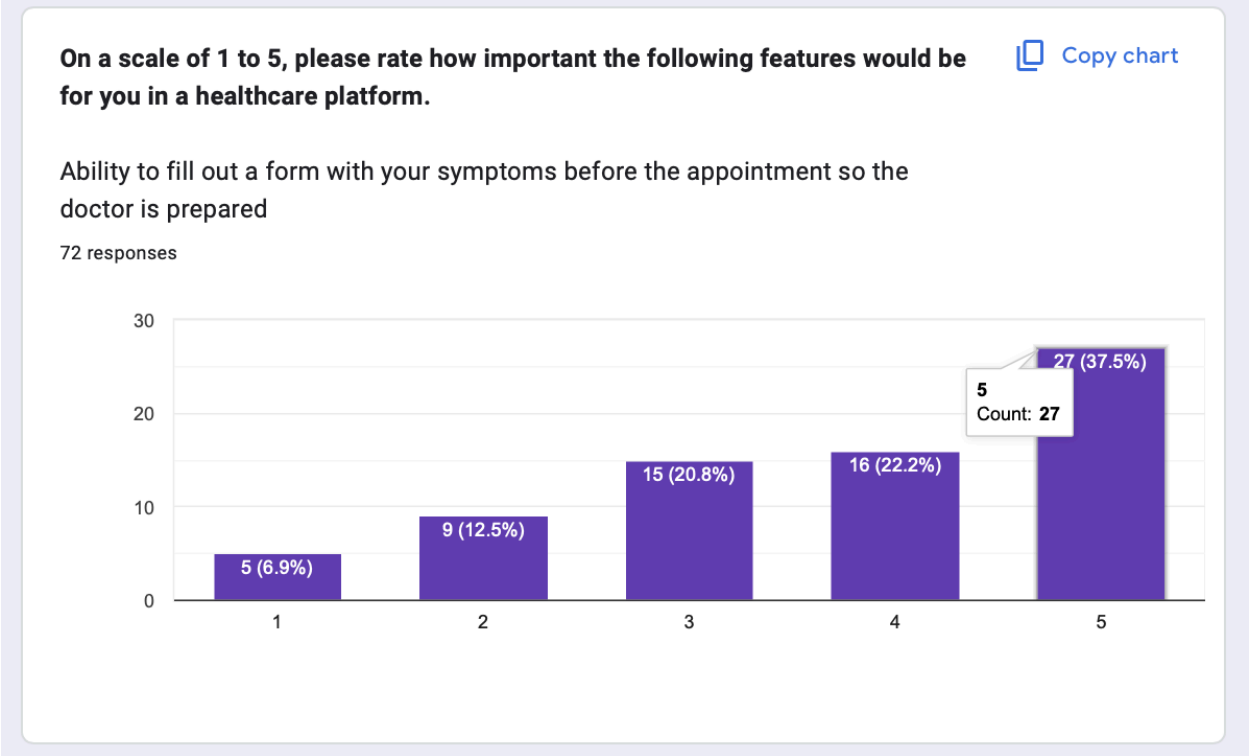
FR-04: Appointment Booking

- **Elicitation Technique:** Joint Application Design (JAD) & Prototyping
- **Justification:** Booking an appointment must be easy. We used Joint Application Design (JAD), a workshop where we designed the booking

steps together with developers and potential users. Based on those ideas, we used Prototyping to create a clickable demo, which let everyone test the flow to make sure it was simple.

FR-05: Pre-Visit Data Intake

- **Elicitation Technique:** Interviews
- **Justification:** We knew doctors would be better prepared if they had patient info beforehand, but we didn't know what information was most important. We conducted Interviews with a few doctors and simply asked them, "What questions do you always ask at the start of a consultation?" Their answers directly became the questions in our pre-visit form.



FR-06: AI Triage System

- **Elicitation Technique:** Brainstorming & Interviews
- **Justification:** A doctor needs to know which patient to help first. The idea for an "AI assistant" started in a team Brainstorming session where we thought of ways to solve doctors' biggest problems. To make this idea smart, we then conducted one-on-one Interviews with medical experts. We asked them, "How do you decide if a case is urgent?" They gave us the

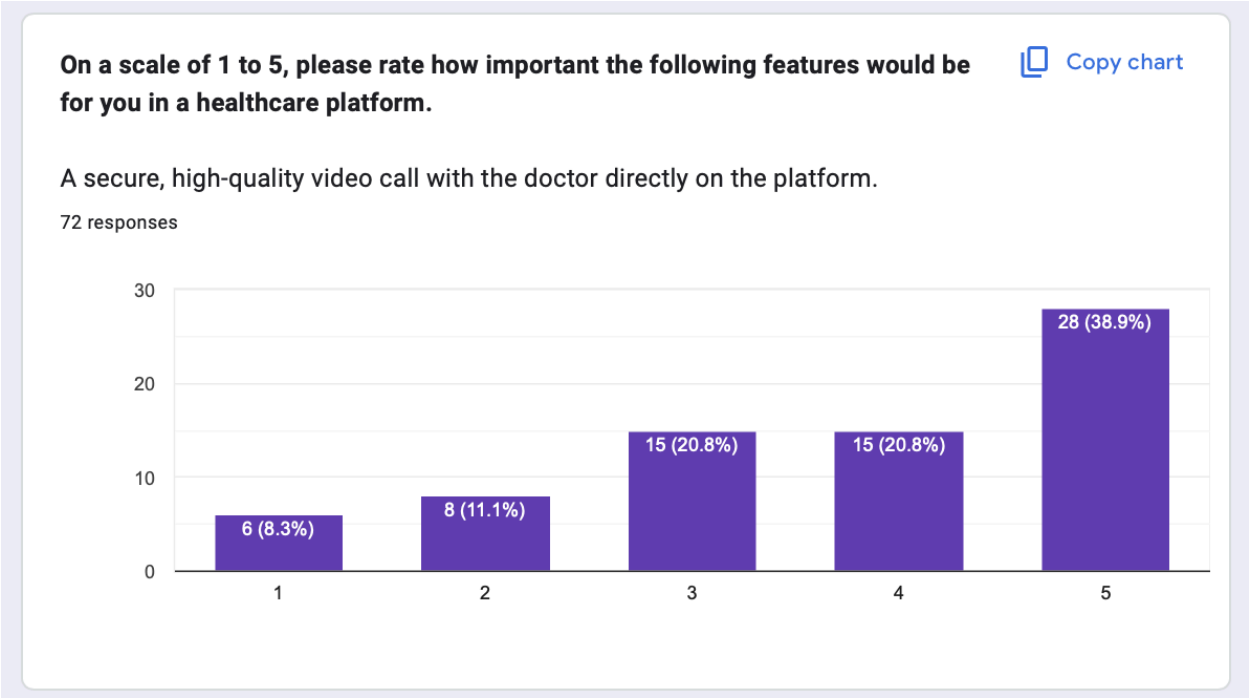
specific symptoms and medical keywords to look for, which provided the expert rules needed to build the AI's logic.

FR-07: Doctor’s Triage Queue

- **Elicitation Technique:** Prototyping
- **Justification:** For the AI's priority list to be useful, the design must be instantly understandable. We used Prototyping to visualize different ways to display the queue. Creating clickable demos allowed our team to experiment with various layouts, such as a simple list versus a color-coded system. This hands-on approach made it clear that using colors was the most effective way to highlight urgent patients.

FR-08: Video Consultation

- **Elicitation Technique:** Google Form Surveys
- **Justification:** The Google Form Survey confirmed this is a critical feature. Users gave a very high importance rating to having a "secure, high-quality video call." It also directly solves the stated challenges of "long waiting times" and "travel distance."



FR-09: E-Prescription

- **Elicitation Technique:** Task Observation
- **Justification:** To create a digital prescription that is safe and easy, we used Task Observation. Our team carefully watched how doctors complete prescriptions in the real world. We took note of every single step and all the essential information they include, such as patient details, medication dosage, and frequency. Our final online prescription form is a direct digital version of this observed, real-world process.

FR-10: Payment Integration

- **Elicitation Technique:** Stakeholder Analysis
- **Justification:** A business needs to handle payments. We used Stakeholder Analysis, where we, as the project owners, defined the financial rules for the app. We decided that requiring patients to pay before the consultation was the best model to ensure the project is successful.

FR-11: Feedback System

- **Elicitation Technique:** Stakeholder Analysis & Task Observation
- **Justification:** First, we used Stakeholder Analysis and decided that measuring user satisfaction is a key business goal for our project. To figure out the best way to collect feedback, we then used Task Observation. We looked at how popular apps people use every day, like Uber or Zomato, handle feedback. We observed that the most common and clear method is a simple 5-star rating with an optional comment box. Based on this observation, we chose to build our feedback system in the same familiar way.

Non-Functional Requirements:

NFR-01: Security

- **Elicitation Technique:** Analysis of documentation & Risk analysis
- **Justification:** Security requirements are not optional; they are often mandated by law. Analysis of legal documentation (like the DPDP Act, 2023) is essential to define the specific constraints. Risk analysis is then used to identify potential threats and vulnerabilities.

NFR-02: Reliability

- **Elicitation Technique:** Risk analysis & Stakeholder analysis
- **Justification:** The impact of system downtime (e.g., a missed appointment) is assessed through risk analysis. Based on this impact, a specific uptime target (e.g., 99.9%) is formally agreed upon with business stakeholders.

NFR-03: Performance

- **Elicitation Technique:** Analysis of existing systems & Prototyping
- **Justification:** Performance targets (like page load times) are set by benchmarking against fast, successful competitor applications. These targets are then validated by testing user reactions to the speed of interactive prototypes

NFR-04: Usability

- **Elicitation Technique:** Prototyping & Task observation
- **Justification:** Usability is measured by observing real users. Prototyping provides a testable interface, and task observation (usability testing) allows the team to watch users perform tasks and identify areas of confusion or difficulty.

NFR-05: Scalability

- **Elicitation Technique:** Stakeholder analysis

- **Justification:** Even though this is a project, we wanted to build it correctly. We used Stakeholder Analysis by looking at our own goals as the owners. We decided on two things: 1) The app must be strong enough to handle many users during our final presentation without slowing down. 2) We should use a design that *could* support more users in the future if this were a real product. This thinking helped us make smart choices about our app's architecture from the start.