Product Name: Rapido IVR Voicebot

Objective: The Rapido Voicebot is an Interactive Voice Response (IVR) system designed to automate the onboarding process for individuals interested in becoming captains (drivers) for Rapido, a bike/auto taxi service. The voicebot will guide potential captains through the registration process, document verification, and provide information about the job, earning potential, and requirements.

User Personas:

Prospective Captains: Individuals interested in becoming Rapido captains, seeking information about the job, requirements, and the registration process.

Existing Captains: Captains who have already registered but may need assistance with document uploads, account activation, or additional services like food delivery.

Key Features:

1. Speech Recognition: Accurately transcribe driver responses for seamless interaction.
2. Information Collection: Collect necessary driver details, such as driving license number, name, and contact information.
3. Document Verification: Verify the driver's documents, such as their driving license, in real-time.
4. Communication of Rules and Regulations: Inform drivers about Rapido's rules, regulations, and expectations.
5. Feedback Mechanism: Allow drivers to repeat or confirm their information, and offer assistance if needed.

Onboarding Flow:

Lead to Registration: The process begins either with captains reaching out directly to the voicebot via phone or the voicebot initiating contact after captains register. Initial calls focus on providing comprehensive information about Rapido's offerings, job specifics, and requirements.

Document Verification: The voicebot will guide captains through the document upload process, verifying the documents (profile photo, driving license, vehicle registration certificate, PAN/Aadhaar card) against predefined quality parameters.

Account Activation: Upon successful document verification, the voicebot will activate the captain's account and provide information about logging in, accepting rides, and earning incentives.

Additional Services:

Food Delivery Service: The voicebot will offer existing captains the opportunity to sign up for food delivery services, explaining the process, payment structure, and training them on using the app for food delivery.

Service Management: Captains can enable or disable additional services like food delivery through the voicebot.

Call Handling:

Objection Handling: The voicebot should be capable of handling common objections and concerns raised by potential captains, such as payment issues, incentives, document requirements, and regulatory concerns.

Callback Scheduling: The voicebot should allow captains to schedule callbacks for a later time if they are unable to complete the process during the initial call.

Call Escalation: For complex issues or scenarios not covered by the voicebot, it should have the ability to escalate the call to a human agent.

Integration and Reporting:

CRM Integration: The voicebot should integrate with Rapido's existing Customer Relationship Management (CRM) system to capture and store customer data, call dispositions, and other relevant information.

Reporting and Analytics: The system should provide reporting and analytics capabilities to track call volumes, conversion rates, common objections, and other metrics to help Rapido optimize the onboarding process.

User Flow:

1. Welcome the driver and verify their identity.
2. Collect necessary details, such as driving license number, name, and contact information.
3. Verify the documents in real-time.
4. Communicate Rapido's rules, regulations, and expectations.
5. Offer the driver an option to repeat or confirm the information.
6. Provide assistance if needed.

Technical Requirements:

1. Integration with Rapido's existing IVR system.
2. Seamless data exchange between the voicebot and Rapido's backend systems.
3. Compliance with data privacy regulations and security best practices.
4. Scalability to handle high volumes of concurrent calls.
5. Voice Recognition: The voicebot should have robust voice recognition capabilities to accurately interpret and respond to user input.
6. Natural Language Processing (NLP): NLP capabilities should be implemented to understand user queries and provide relevant responses.
7. Multilingual Support: The voicebot should support multiple languages and accents, based on Rapido's target markets.

8. Security and Compliance: Appropriate security measures should be implemented to protect user data and ensure compliance with relevant regulations.

Timeline:

1. Not Defined Yet
2. Not Defined Yet
3. Not Defined Yet

Success Metrics:

- Increase in captain registrations.
- Reduction in manual effort and time for onboarding and document verification
- Improved customer satisfaction and experience during the onboarding process
- Increased adoption of additional services like food delivery among existing captains

Open-Source Voice to Text

- Mozilla's DeepSpeech: An open-source speech-to-text engine based on Baidu's Deep Speech research paper. It uses a model trained by machine learning techniques based on Baidu's Deep Speech research paper. GitHub
- Kaldi: A speech recognition toolkit developed by Johns Hopkins University. Kaldi is a powerful and versatile toolkit that supports various speech recognition tasks and is used by many organizations and researchers. GitHub
- PocketSphinx: A lightweight speech recognition engine developed by Carnegie Mellon University. PocketSphinx is well-suited for embedded and mobile devices due to its compact size and low computational requirements. GitHub

- Jasper: An open-source platform for developing always-on, voice-controlled applications. Jasper includes a speech recognition engine, a text-to-speech synthesizer, and a natural language understanding component. GitHub
- Rasa: An open-source platform for building conversational software, including voicebots and chatbots. Rasa includes components for natural language understanding, dialogue management, and response generation. GitHub