

EA Layer	Link to Improve Functionality	AI Tool to be used	Application to my MVP
Business	<p>Expands SmileBots' accessibility to everyday users via WhatsApp</p> <p>Provide multilingual support for user inclusivity.</p>	<p>Poe-trained SmileBot</p> <p>WhatsApp Business API (Meta)</p>	Enables deployment on WhatsApp, drastically increasing potential reach and usability for the South African target audience.
Application	<p>Integrates Firebase Functions as middleware to manage the bot requests and responses.</p> <p>Replaces the static, rule-based application logic with a dynamic, intelligent AI backend that can understand natural language.</p>	<p>Firebase</p> <p>Poe AI API</p>	Poe handles intelligent replies, and Firebase connects WhatsApp to Poe AI. This serves as the new "brain" for SmileBot, processing user queries and generating context-aware, personalized responses in real-time.
Data	<p>Data is secured and temporarily stores messages sent through WhatsApp for future context.</p> <p>Data flow is improved by making an event-driven pipeline from user to AI and back, securely in the cloud.</p>	<p>Poe's API (context-aware)</p> <p>Firebase Secrets Manager</p>	<p>Real-time responses ensuring no long-term sensitive storage without consent.</p> <p>Firebase manages and secures all sensitive API keys (WhatsApp, Poe AI) outside of the application code, following best practices for data security.</p>
Technology	Modernizes the bot by utilizing cloud-based serverless functions and Meta's WhatsApp Business Cloud API for scalability.	<p>Firebase Cloud Functions</p> <p>WhatsApp Business API (Meta)</p> <p>Poe AI</p>	Serverless deployment ensures robust, scalable cloud infrastructure that hosts the chatbot logic, connects APIs, and handles the webhook seamlessly.