Community Support: Connecting In-Need Individuals With Essential Services in South Africa Through an Accessible Instant Messaging Service

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The rise of community support platforms has captured the attention of various fields, from leisure to customer support. The existing solutions are often exclusive or add-ons to existing systems, failing to harness the full potential of the community support concept. The project aims to develop an accessible, efficient, reliable, secure and user-friendly program that will bridge the gap between those seeking support and the necessary services. The program was developed using Node.js and is accessed through a widely used instant messaging service. Through the program, users could input limited personal information and receive services in return. An API was developed to handle algorithms and database communication. Graphing, statistics management and data patterns were also developed and integrated. A separate API was created to handle algorithmic processes and database communication. Features such as data graphing, statistical management, and pattern analysis were also implemented within the system. The program identified and presented vital support services in a clear and accessible manner. The service provided a user-friendly platform that allowed individuals to engage in interactive chat with an AI-powered assistant, covering a range of topics including drug management and medical aid. The service also offered reports on local events such as fires and floods, while allowing users to report. The project effectively created an interface between those in need and the support services they required. The project offered a degree of support not yet available in South Africa and demonstrated the potential for development.