

DeltaHacks - Hotel Dieu Shaver Challenge

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Challenge Info

- ALS patients that have difficulty speaking and moving require PAS (Partner Assisted Scanning) to communicate.
- The challenge is to combine aspects automated and manual approach in the form of a app which also requires minimal movement from the patient
- Requirements:
 - Easy to see
 - Whole screen act as switch
 - Message visible at all times
 - Text to speech function
 - Run the application without internet

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Demonstration/Features

- Clear and backspace to fix mistakes
- Text to speech and speech when scanning
- Large fonts and simple design for readability
- Division of letters by vowels
 - Patients are used to this method
- Text is always visible
- Switch access with volume key (also customizable in phone settings)
- "GO BACK"



Future Implementations

- Personal accounts
 - Tracks common words and suggests the best for clients
 - Utilize machine learning to optimize
- Cross-Platform
- Suggested/Predictive Text
- Use Google Images API to find images of predicted or related words
- Numbers and Punctuations
- Improve user-friendly and design
- Have the switch access fully implemented within the application
 - Prompt to request permission and adjust settings