

## MACPAS

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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
- "GO BACK"



## Future Implementations

- Eye-tracking
- Personal accounts
  - Tracks common words and suggests the best for clients
  - Utilize machine learning to optimize
- Suggested/Predictive Text
- Use Google Images API to find images of predicted or related words