Voice Recognition in Gaming

Data Science Final Project

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**Goal:**

* Facilitate accessibility to games using voice recognition for individuals or situations where using hands for a controller is improbable/impossible.
* Creating a game that uses voice recognition for all commands and activities, providing a seamless realistic scenario for entities like Pokémon.

**Tasks:**

* Collect voice data for game movements and tasks.
* Design and train a model to recognize voice data and predict outputs for voice inputs.
* Create an app that connects to Nintendo switch via USB and allows the user to utilize voice inputs to control the game.
* Design a custom Pokémon battle game for player vs player battle
* Use the voice model as a base for developing a further model that recognizes battle moves and interface commands for a custom game.
* Test the new model with all related commands for the custom game.
* Create a game app that runs the game with voice input as game commands
* Create a campaign mode for the game and train the model for the new data
* Create a GUI for the game (instead of terminal based)

**Deliverable:**

* Create a Nintendo switch voice recognition app
  + Collecting voice data
  + Training a model for control input recognition via voice.
  + Testing the model and predicting outputs based on voice inputs.
  + Creating an app that lets you play Nintendo switch games using voice inputs
  + Testing the model with at least one game as proof of concept