Single Switch Technology for Teaching Adolescents to Scan

PennState College of Engineering | ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

RERC on AAC

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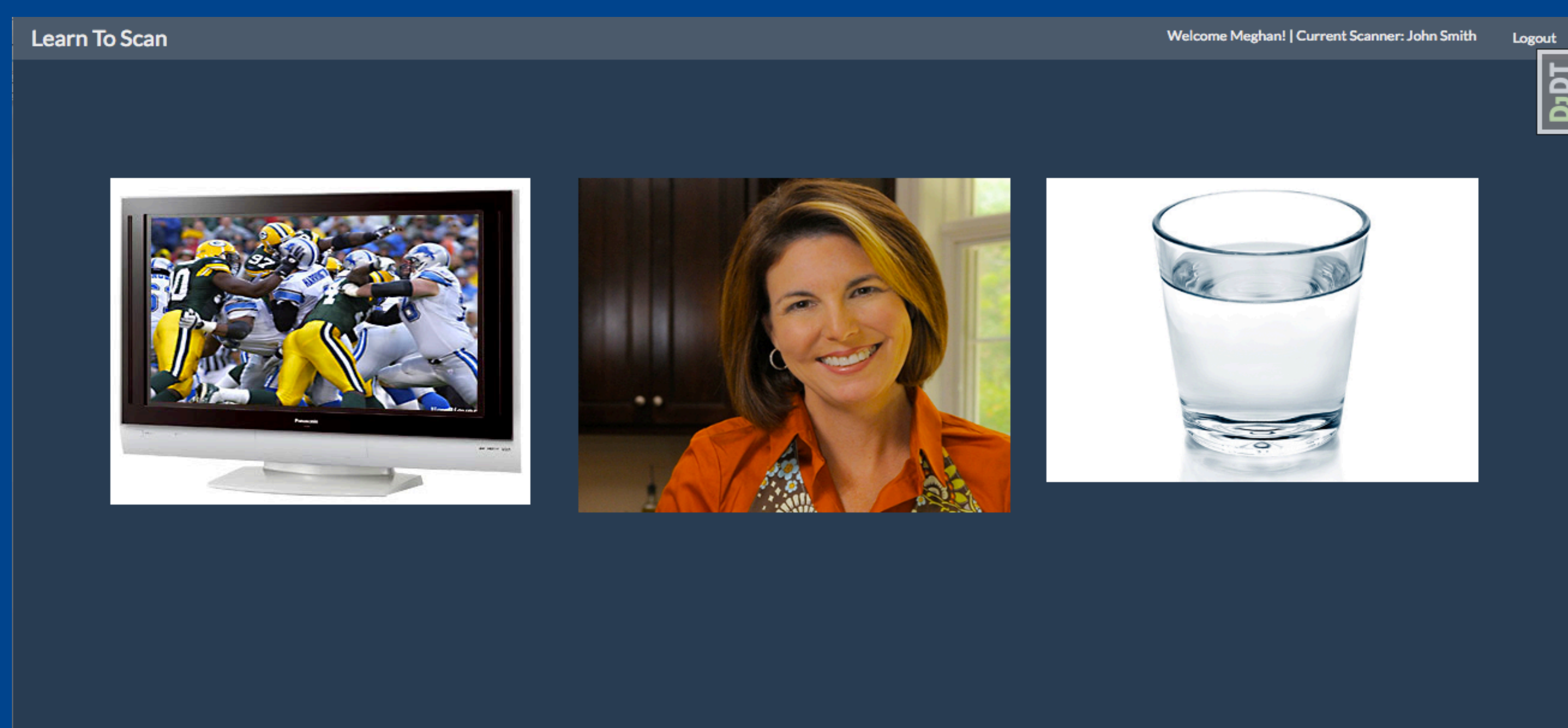https://www.prentrom.com/news/sean-walker-aims-high-and-finds-success

Our goal was to design a tool to teach adolescents with physical disabilities how to scan. Communicating through scanning poses many challenges. Teaching the basic concepts of scanning through a very simple interface takes the burden of learning a complicated system off the user.
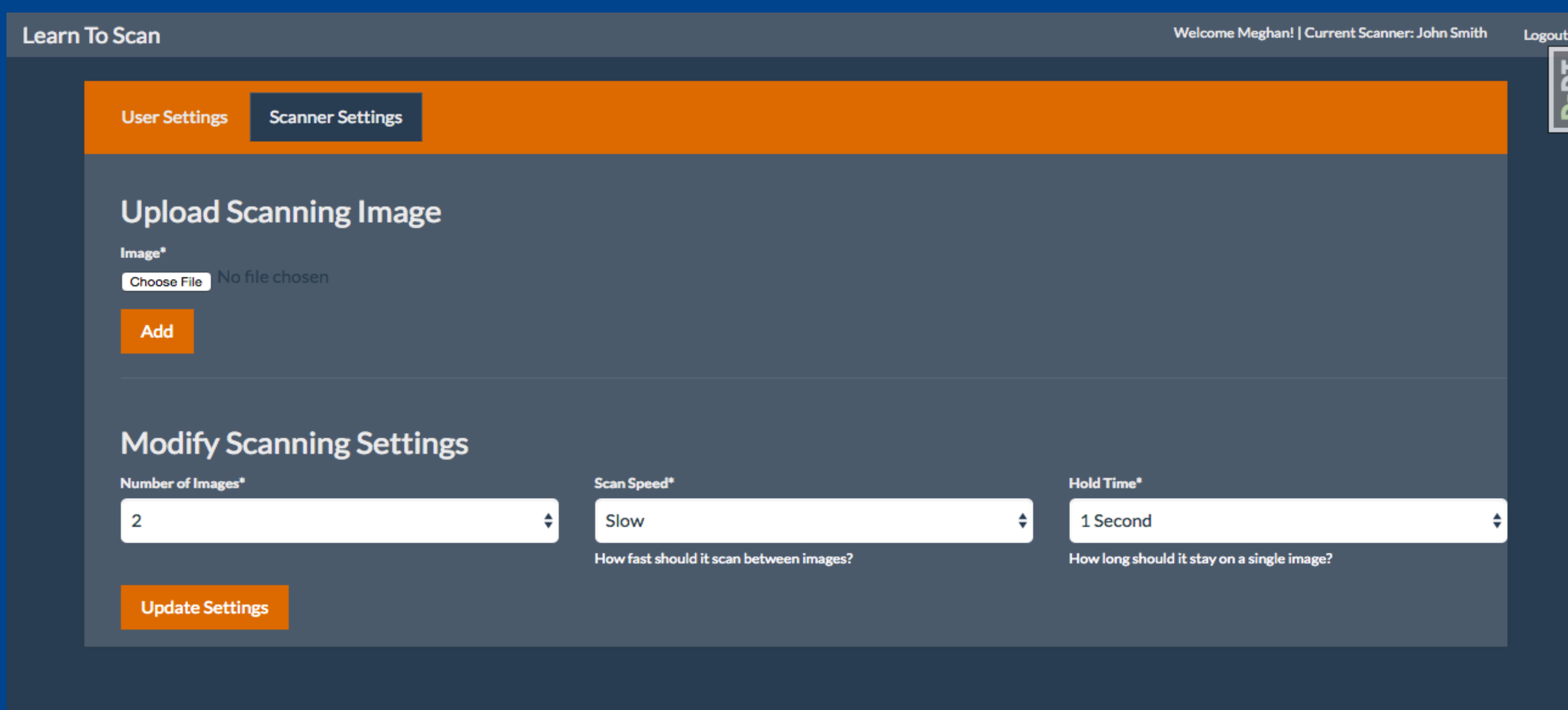
- In the settings page, the user can control the speed of scanning and the specific images used. This allows the user to gradually build up their scanning skills.
- The pictures used for scanning can be uploaded and saved to create a more personalized feel for the user. Personal pictures also make it easier for the user to understand the concept.

- The presentation of the scanning array will be based on research by Light (1993) and McCarthy et al (2006). Scanning items will be "offered" to the user by dynamic enlargement of the image. When selected, a brief animated gif will play as reinforcement and confirmation of the scanning selection.