Sairam Krishnan

Deeptaan Kumar

Connie Yao

Kathy Yu

Stepping Shop | Team 5

Technical Specification (UPDATED)

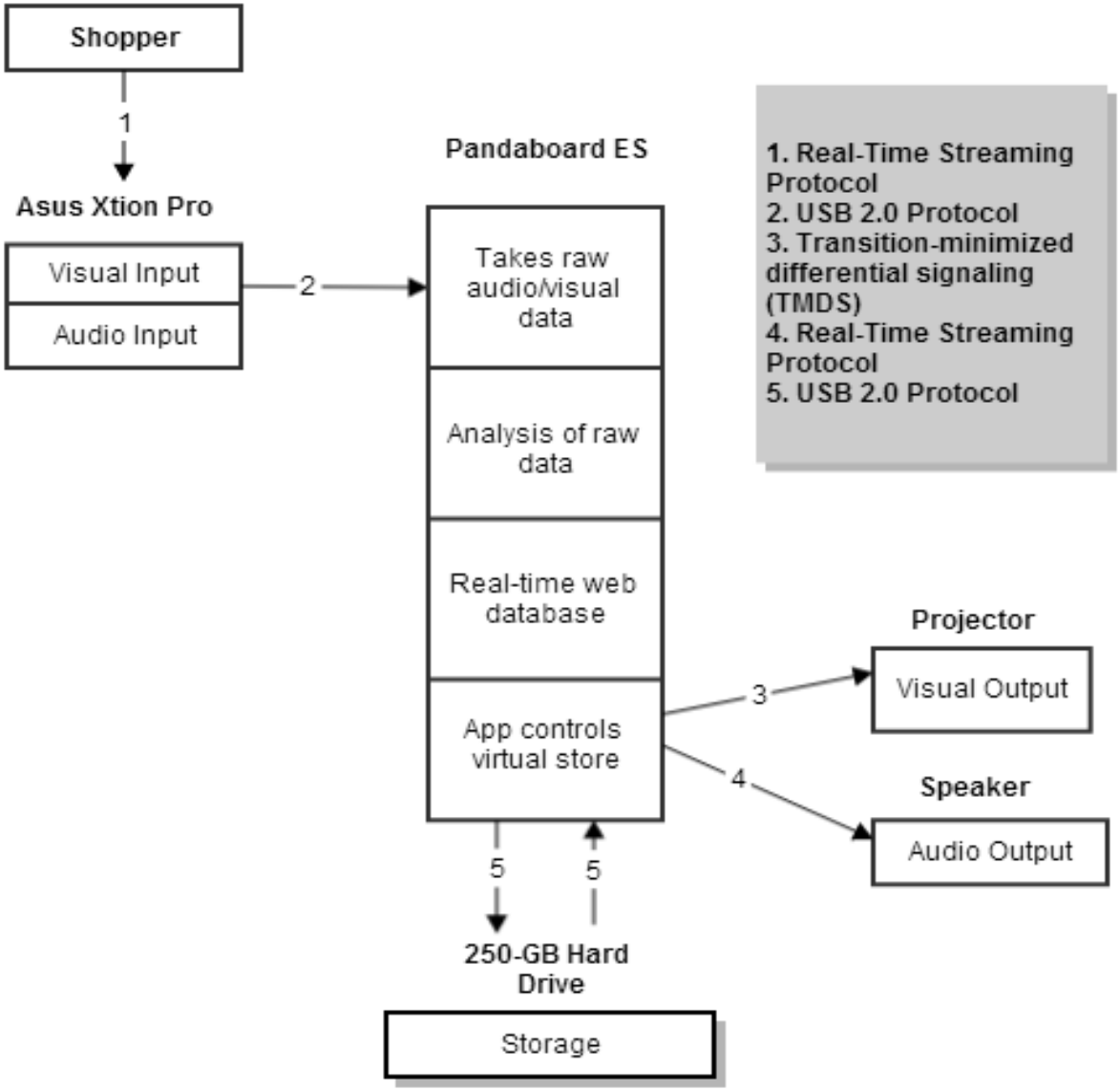
- Hardware
  - Asus Xtion Pro
  - Trade Show Display Screen
  - Hi-Def Projector
  - Microphone
  - Speaker
  - Pandaboard ES

- Software
  - OpenNI SDK
  - Voice Input Interpreter
- Protocol
  - Real-Time Streaming Protocol
  - USB 2.0 Protocol
  - Transition-minimized differential signaling (TMDS)

Features

- Essentials
  - Display interior of store, w/ products on wall.
  - Allow users to navigate store (update display accordingly) through hand gestures.
- Extras
  - Voice search (Say the desired area of store that you want to go to)
  - Payments processing (Allow users to pull up details about products and buy products)
  - Recommend products to friends (social aspect)

Architecture



Risks	Strategies
Environment may too noisy for voice commands	User stands in specific spot for the microphone
Some users, like senior citizens, have restricted level of motion	Option to have Accelerated Mode where motions are much more sensitive
Users may want to keep their buying private	Option for Incognito Mode
Xtion Pro Motion Sensing Fail	Voice Commands: "Left, Right, Forward, Close-up, etc."
Microphone Voice Command Fail	Have an inventory map to select items from

Questions, Comments, Concerns?

Sairam Krishnan, Deeptaanshu Kumar, Connie Yao, Kathy Yu