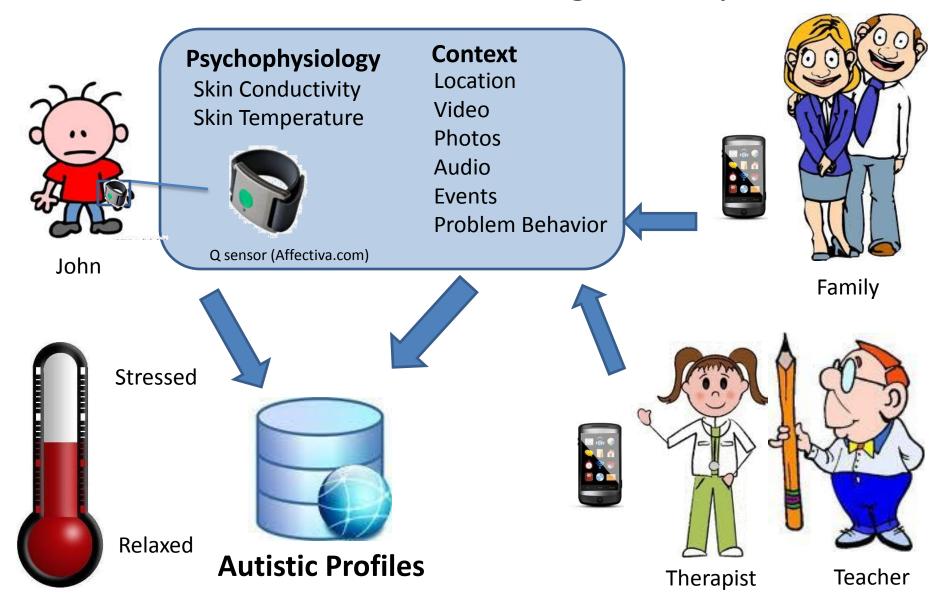
# AMA, an application for Annotation, Monitoring & Analysis Helping to Understand Autism

MAS 771: Autism Theory & Technology

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### **Project Review**Annotation, Monitoring & Analysis



### **Background: Annotation & Monitoring**

- Paper-Based
  - Prone to errors
  - Slow





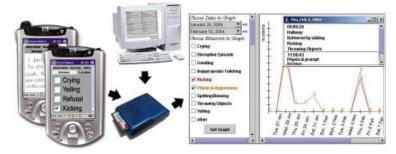
- Other tools for annotations
  - Keypads
  - Cellphone Apps
  - CareLog







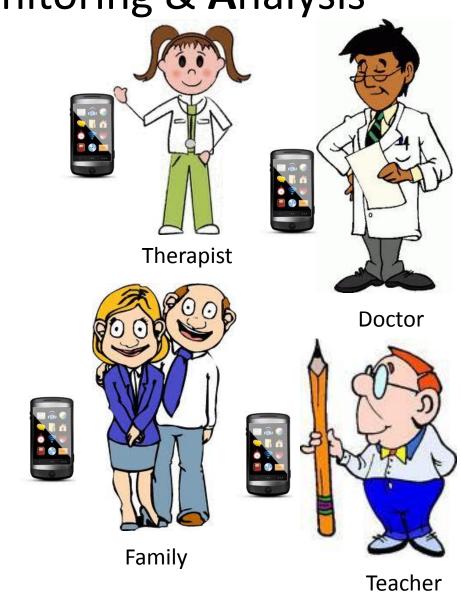




## Strengths of AMA Annotation, Monitoring & Analysis

- Portable
- Scalable
- Shareable
- "Cheap"
- Customizable
- Accurate





#### **Annotations**

#### Exercise







Relaxation











Hand Flapping



Speech

Lunch



Reading



#### **Annotation**



**Main Menu** 



**Summary of Annotations** 

#### Customization







**Settings Menu** 

**Personalized Buttons** 

**Different Participants** 

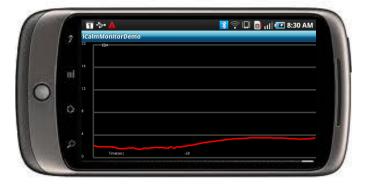
#### 🔻 🛜 🔲 📵 🔟 🖅 8:28 AM iCalmMonitorDemo View this sensor: FireFly-9641 (00:06:66:04:96:41) EDA (mho) :0.004634625 Temp (C) :33.242588 Accel: 32585.0,32898.0,32888.0 Battery (Volts) :212 Heart Rate (BPM) :Infinity Recording Disconnect Find Sensor

**Multimodal Data** 

#### Sensors



**Images** 



**Skin Conductivity** 



**Accelerometers** 

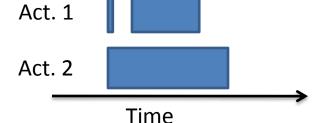
#### Learned Lessons

- Cell phone is good platform
  - Android

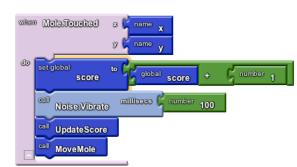




- Types of Annotations
  - Duration
  - Overlap



Size of Display





#### **Future Work**

- Further Development
- User Study/Validation
  - Interview Teachers at Groden Center
  - -Subjective/Objective Evaluations
- Data Visualization
- More Sensors (e.g., GPS, Bluetooth)
- Automatic Annotation Using EDA Levels

