AMA, a Tool for Behavioral Annotations

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• Starting AMA
• Annotation
  – Events
  – Video/Images/Audio
• Managing Annotations
• Customization
  – Participant
  – Groups of Events
  – Events
Description

• AMA is an application for annotation
• You will be able to:
  – Annotate user-defined events
  – Record video/photo/sound
  – Customize buttons and groups of buttons
  – Manage annotations
Starting AMA

Application
## Starting AMA

### Participant

- Video
- Photo
- Sound

### Schedule 1

<table>
<thead>
<tr>
<th>Participant</th>
<th>Video</th>
<th>Photo</th>
<th>Sound</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bathroom</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>Imagery</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>Vocational</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>Good Deeds</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>Speech</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>CLE</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
</tbody>
</table>

### Behavior 1

<table>
<thead>
<tr>
<th>Participant</th>
<th>Video</th>
<th>Photo</th>
<th>Sound</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-injury</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>Rocking</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>Hand-flapping</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
<tr>
<td><strong>Tantrum</strong></td>
<td><img src="image1" alt="Video" /></td>
<td><img src="image2" alt="Photo" /></td>
<td><img src="image3" alt="Sound" /></td>
</tr>
</tbody>
</table>

### Current Time

**15:04:00**
Help
This window allows the user to annotate different types of events. Following there is a description for each button.

Button to capture videos. If using a tablet, the user can choose between front or back cameras. Video can be captured at the same time as other events.

Button to capture photos. It uses the native camera application of the device.

Button to capture audio. The user can select the type of audio before recording (e.g., personal note, environment sound, other).

### Types of Events

<table>
<thead>
<tr>
<th><strong>Short (onset == offset)</strong></th>
<th>Click once to make the annotation.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long (onset != offset)</strong></td>
<td>The first click will indicate the beginning of the event and the second click will indicate the end of the event. The annotation can be cancelled by long-pressing the button when it is active.</td>
</tr>
<tr>
<td><strong>Repeated (many short events)</strong></td>
<td>The first click will activate the event and the system will check if the event is happening every certain number of seconds (this parameter can be configured in the Settings menu). Every time the event is happening a separate annotation will be recorded. The second click will disable the event.</td>
</tr>
<tr>
<td><strong>Other Event</strong></td>
<td>This button allows the user to create an event on the fly. The user can indicate the name of the annotation either by typing the text of through voice (requires Internet connection). The behavior of this button is the same as the long duration button (i.e. the user needs specifies the start and end of the event separately).</td>
</tr>
</tbody>
</table>
Annotating Events

Participant 1

Schedule 1

- Bathroom
- Imagery
- Vocational
- Good Deeds
- Lunch (00:03:00)
- Speech
- CLE
- Relaxation
- Fitness
- Physical Education
- Reading-Action
- Leisure/Sensory
- GCS Mail Delivery

Behavior 1

- Self-injury
- Rocking
- Hand-flapping
- Tantrum

Ongoing Annotations are Highlighted in Green
Annotating Video

You can make other annotations while recording video
Annotating Photos
Annotating Audio

You can make other annotations while recording audio.
Managing Annotations

Schedule 1
- Bathroom
- Imagery
- Vocational
- Good Deeds
- Lunch
- Speech
- Relaxation
- Fitness
- Physical Education
- Reading-Action
- Leisure/Sensory
- GCS Mail Delivery

Behavior 1
- Self-injury
- Hand-flapping
- Tantrum

Summary Settings Help Exit
# Managing Annotations

**01 May 2012**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
<th>Time</th>
<th>Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lunch</td>
<td>15:10:12</td>
<td>15:10:17</td>
<td>Participant 1</td>
</tr>
<tr>
<td>Reading-Action</td>
<td>15:10:15</td>
<td>15:10:18</td>
<td>Participant 1</td>
</tr>
<tr>
<td>Self-injury</td>
<td>15:10:31</td>
<td>15:10:31</td>
<td>Participant 1</td>
</tr>
<tr>
<td>Hand-flapping</td>
<td>15:10:32</td>
<td>15:10:32</td>
<td>Participant 1</td>
</tr>
<tr>
<td>Lunch</td>
<td>15:10:37</td>
<td>15:19:12</td>
<td>Participant 1</td>
</tr>
<tr>
<td></td>
<td>15:11:26</td>
<td>15:17:09</td>
<td>Participant 1</td>
</tr>
<tr>
<td></td>
<td>15:15:10</td>
<td>15:17:07</td>
<td>Participant 1</td>
</tr>
<tr>
<td></td>
<td>15:17:19</td>
<td>15:18:42</td>
<td>Participant 1</td>
</tr>
</tbody>
</table>

**Back**

**Settings**
Managing Annotations

### Help

This window shows all of the annotated events.

<table>
<thead>
<tr>
<th>Event Name</th>
<th>13:30:21</th>
<th>13:35:21</th>
<th>Participant</th>
</tr>
</thead>
</table>

The left column indicates the type of event that was recorded. This can be a user’s pre-defined event, a video, a photo or an audio recording. Click on audios, images or videos annotations will display/reproduce its content.

The two columns of the center indicate the start and end times of the event. The time is provided in 24 hour format. Short-press of this button will allow the user to modify the time. If the background color is blue, the end time is on a different date than the start time.

The right column indicates the participant that annotated the event.

The menu button on the bottom of the screen allows the user to delete all of the annotations (Clear All) or export them to a .csv file that can be attached to an e-mail (requires Internet connection).
Customization

Participants 1

Schedule 1
- Bathroom
- Imagery
- Vocational
- Good Deeds
- Lunch
- Speech
- Relaxation
- Fitness
- Physical Education
- Reading-Action
- Leisure/Sensory
- GCS Mail Delivery
- CLE

Behavior 1
- Self-injury
- Hand-flapping
- Tantrum
Customization

All the information of the main screen can be customized
Customization

Help
This window shows the different settings.

Participants
Option to manage the users of the application.

Groups of Events
This option allows the users to customize the different sections that will appear on the main screen.

Events
This option allows the users to add, remove, group and customize the behavior of events.
Customization: Participant

<table>
<thead>
<tr>
<th>Current:</th>
<th>Participant 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photo</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>Participant 1</td>
<td></td>
</tr>
<tr>
<td>Participant 2</td>
<td></td>
</tr>
<tr>
<td>Participant 3</td>
<td></td>
</tr>
</tbody>
</table>
Customization: Participant

Help
Each annotation has a user associated to it. This window allows to manage the users of the application.

Select Current User
The button Current allows to select the current user of the application.

Photo Button
The column Photo allows the user to capture a photo of a certain user. Short-press opens the camera to capture a photo.

Name Button
The column Name contains the names of the users. Short-press allows changing the name.

Add New User
The user can add new users by clicking on the menu button on the bottom of the screen. Once that it is created, the user will be automatically added to the list.
# Customization: Groups of Events

<table>
<thead>
<tr>
<th>Visible?</th>
<th>Group Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Schedule 1</td>
</tr>
<tr>
<td>Yes</td>
<td>Behavior 1</td>
</tr>
<tr>
<td>No</td>
<td>Schedule 2</td>
</tr>
<tr>
<td>No</td>
<td>Behavior 2</td>
</tr>
<tr>
<td>No</td>
<td>Schedule 3</td>
</tr>
<tr>
<td>No</td>
<td>Behavior 3</td>
</tr>
</tbody>
</table>
Customization: Groups of Events

**Help**
This window allows the user to modify the events that will be shown on the main screen.

<table>
<thead>
<tr>
<th>Visible?</th>
<th>Group Name</th>
</tr>
</thead>
</table>

**Visible?**
It indicates whether a group of events is shown on the main screen.

**Group Name**
It indicates the name of the group. Short-press allows to change the name.

**Add a New Group**
The user can add new groups of buttons by clicking on the menu button on the bottom of the screen. Once that it is created, the group will automatically appear on the screen.
# Customization: Events

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Group</th>
<th>Type of Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathroom</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Relaxation</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Imagery</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Fitness</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Vocational</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Good Deeds</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Reading-Action</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Lunch</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Leisure/Sensory</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>Speech</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
<tr>
<td>GCS Mail Delivery</td>
<td>Schedule 1</td>
<td>Long</td>
</tr>
</tbody>
</table>
Customization: Events

### Help

This window allows the user to manage the different events that can be annotated.

<table>
<thead>
<tr>
<th>Event Name</th>
<th>Group Name</th>
<th>Type of Event</th>
</tr>
</thead>
</table>

#### Event Name

This button indicates the name of the event. Short-press allows the user to change the name.

#### Group Name

This button indicates the group of event to which a particular event belongs. The groups of events can be managed in Settings/Groups of Events.

#### Type of Event

This button allows the user to change the type of event. The different types are as follows:

- **Short (onset == offset)**: Click once to make the annotation.
- **Long (onset != offset)**: The first click will indicate the beginning of the event and the second click will indicate the end of the event.
- **Repeated (many short events)**: The first click will activate the event and the system will check if the event is happening every certain number of seconds. This parameter can be configured by long-pressing this button.

#### Add a New Event

The user can add a new event by clicking on the menu button on the bottom of the screen. Once that it is created, the event will automatically appear on the screen.
If you have any questions or concerns, please do not hesitate to send us an e-mail to:

Javier Hernandez (javierhr@mit.edu)
Akane Sano (akanes@mit.edu)