Open Exhibits
Timeline Manual

The timeline exhibit is a multitouch interface that allows scrolling of information panels accompanied by a description overlay panel.

The exhibit is fully configured in CML to support easy customization of features. Each panel can have associated images and descriptions. Font sizes and colors, information overlay background color, and the number of media files are all customizable.

User Interface

library/images
This folder contains the exhibit image files.

Timeline.cml
This file contains the markup that describe timeline.

```
<Album x="0" y="120" margin="20" width="1920" height="890" backgroundAlpha="0"
mouseChildren="true" clusterBubbling="true">
        <RenderKit dataRootTag="museum">
                <Renderer>
                        <TouchContainer width="640" height="890" mouseChildren="true">
                        <Graphic shape="rectangle" width="640" height="890" fill="color" color="0xffffff"
                        lineStroke="0" alpha="0.7"/>
                        <TouchContainer mouseChildren="false" targetParent="true">
                                <Image src="{imagepath}" width="640" height="500"/>
                        </TouchContainer>
                        <TouchContainer mouseChildren="false" targetParent="true">
                                <Text id="txt1" text="{title}" x="{title-x}" y="520" autoSize="center"
                                color="0x000000" fontSize="35" width="640" font="OpenSansRegular"
                                selectable="false"/>
                                <Text id="txt1" text="{location}" x="{location-x}" y="580"
                                autoSize="center" color="0x303030" fontSize="30" width="640"
                                font="OpenSansRegular" selectable="false"/>
                                <Text id="txt1" text="{year}" x="260" y="620" autoSize="center"
                                color="0x000000" fontSize="70"  font="OpenSansRegular"
                                selectable="false"/>
                                <Text id="txt1" text="{excerpt}" x="50" y="730" autoSize="center"
                                selectable="false" color="0x000000" fontSize="20" alpha="0.6"
                                wordWrap="true" multiline="true" width="540" height="300"
                                font="OpenSansRegular"/>
                        </TouchContainer>
<Button id="info-btn" class="info_btn" dispatch="{button-dispatch}" hit="info-hit" initial="info-up"
down="info-down" up="info-up" out="info-up" x="570" y="830">
        <Container id="info-up">
                <Graphic alpha="0.5" shape="circle" radius="20" lineStroke="0" color="0x000000" />
                <SWF alpha="1" x="15" y="8" color="0xFFFFFF" scale="1.6"
                classRef="org.openexhibits.assets.Info" />
        </Container>
        <Container id="info-down">
                <Graphic id="info-bg-down" shape="circle" radius="20" lineStroke="0"
                color="0x474747"/>
                <SWF alpha="0.5" x="15" y="8" color="0x000000" scale="1.6"
                classRef="org.openexhibits.assets.Info" />
        </Container>
        <Container id="info-hit" alpha="0">
                <Graphic id="info-bg-down" shape="circle" radius="20" lineStroke="0"
                color="0x666666"/>
        </Container>
</Button>
<TouchContainer mouseChildren="false" targetParent="true">
```

```xml
<Graphic id="{panel-id}" visible="false" shape="rectangle" width="640" height="890" fill="color"
color="0x0000000" lineStroke="0" alpha="1" mouseChildren="true">
<Image src="{imagepath-2}" width="640" height="500"/>
<Text id="txt1" text="{museum-text}" x="50" y="540" width="540" height="860" color="0xffffff"
wordWrap="true" multiline="true" fontSize="20" font="OpenSansRegular"/>
        <Button x="590" y="20" class="close_btn" dispatch="{button-dispatch}" hit="close-hit"
        initial="close-up" down="close-down" up="close-up" out="close-up" scale="0.75">
                <Container id="close-up" class="up" >
                        <Graphic alpha="1" shape="circle" radius="20" lineStroke="0"
                        color="0xffffff" />
                        <SWF alpha="1" x="11" y="11" color="0x000000" scale="1.6"
                        ref="org.openexhibits.assets.Close"/>
                </Container>
                <Container id="close-down" class="down">
                        <Graphic alpha="1" shape="circle" radius="20" lineStroke="0"
                        color="0x000000"/>
                        <SWF alpha="1" x="11" y="11" color="0xffffff" scale="1.6"
                ref="org.openexhibits.assets.Close" />
                </Container>
                        <Container id="close-hit" class="hit">
                                <Graphic id="close-hit-bg" shape="circle" radius="20"
                                alpha="0"/>
                        </Container>
        </Button>
</Graphic>
</TouchContainer>
</TouchContainer>
</Renderer>
```

***Each panel is rendered using the data structure below.**

```xml
<RendererData>
        <museum>
                <button-dispatch>down:boston</button-dispatch>
                <panel-id>boston</panel-id>
                <imagepath>library/images/boston2.jpg</imagepath>
                <imagepath-2>library/images/boston.jpg</imagepath-2>
                <title>Museum of Science, Boston</title>
                <title-x>40</title-x>
                <location>Boston, Massachusetts</location>
                <year>1830</year>
                <excerpt>The Museum of Science is a Boston, Massachusetts landmark, located in
                Science Park, a plot of land spanning the Charles River. Along with over 500 interactive
                exhibits, the Museum features a number of live presentations throughout the building
                every day.</excerpt>
                <museum-text>Over the next five years, the Museum of Science will be undergoing a
                major renovation to upgrade the museum to current day standards. This $250 million
                campaign is to upgrade nearly half of current Exhibit Halls and open three new major
                exhibits.</museum-text>
        </museum>
</RendererData>
</RenderKit>
</Album>
```

cml/buttons/closeButton.cml
The close button closes the info panel overlay.

```
<Button id="close-btn" class="close_btn" dispatch="down:close" hit="close-hit" initial="close-up"
down="close-down" up="close-up" out="close-up" scale="0.75">
        <Container id="close-up" class="up" >
                <Graphic alpha="1" shape="circle" radius="20" lineStroke="0" color="0xffffff" />
                <SWF alpha="1" x="11" y="11" color="0x000000" scale="1.6"
                ref="org.openexhibits.assets.Close"/>
        </Container>
        <Container id="close-down" class="down">
                <Graphic alpha="1" shape="circle" radius="20" lineStroke="0" color="0x000000" />
                <SWF alpha="1" x="11" y="11" color="0xffffff" scale="1.6"
                ref="org.openexhibits.assets.Close" />
        </Container>
        <Container id="close-hit" class="hit">
                <Graphic id="close-hit-bg" shape="circle" radius="20" alpha="0" />
        </Container>
</Button>
```

src/Main.as
This file is the main ActionScript file that includes the package import files
and main functions.

Below is custom ActionScript added that allows for the information overlay
to be displayed for all timeline instances.

```
private function onStateEvent(e:StateEvent):void {
        trace(e.target, e.currentTarget, e.id, e.property, e.value);
        if (CMLObjectList.instance.getId(e.value)) {
        CMLObjectList.instance.getId(e.value).visible = !(CMLObjectList.instance.getId(e.value).visible);
  }
 }
```