Technical Documentation

Embodying Compassion in Bodhisattva is written on the ionic platform, an AngularJS wrapper. Kindly familiarise yourself with both AngularJS and ionic before attempting to modify the app.

Setting up the developer environment

This app was written on the ionic platform in Javascript, HTML5, and CSS. To maintain it, you should download the platform and its dependencies:

1. ionic CLI v1.2.9
    a. Supports iOS 6+, Android 4.3+
2. Node v0.10.32
3. Cordova 3.6.3-0.2.13

follow these instructions.

Clone the app by running

$git clone https://github.com/duke-compsci408-fall2014/Compassion

in the directory you'd like to clone the app to.

Test it out
Build and run on iOS:
$ ionic build ios
$ ionic emulate ios
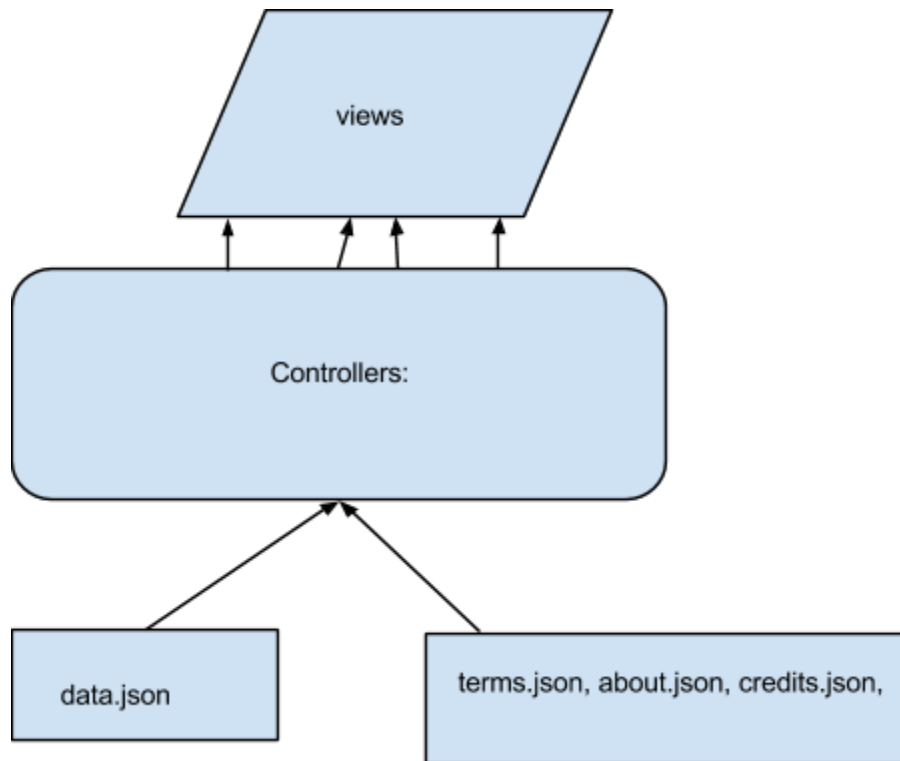
Build and run on Android:
$ionic build Android
$ionic emulate Android

Overall Architecture Design

Like most AngularJS apps, this app was designed with the MVC (model view controller) design pattern in mind.

The model consists of four json files: terms.json, credits.json, about.json and data.json that the controller draws from. The controller is split into the following modules each connecting to various views:

about.js
This module pulls text from about.json and serves it to the view about.html which displays it.

artifact.js
This module takes the parameter $stateParams.artifactId and pulls the artifact from data.json whose id is the same as $stateParams.artifactId. It then serves the views full_screen.html, intermediate.html, and details.html and with that artifact as a json object.

full_screen.html serves the artifact's image. intermediate.html serves the image, it's caption, text, and audio narration of the text. While details.html serves the image, playlist, as well as a map icon and terms icon that redirects to their respective views.

compare.js

This module takes the parameter $stateParams.artifactId and pulls the artifact from data.json whose id is the same as $stateParams.artifactId. It then serves the view compare.html with the artifact as a json object.

It also implements compare.html's caption overlay functionality.

credits.js

This module pulls text from credits.json and serves it to the view credits.html which displays it.

directives.js

explore.js

This module pulls theme data from data.json and serves it to the view explore.html which displays it.

searchartifacts.js

This module pulls all the artifacts from data.json and serves them to the view searchArtifacts.html which displays them. This view also implements string filtering to search for a particular artifact by title and id.

searchterms.js

This module pulls all the terms from terms.json and serves them to the view searchTerms.html which displays them. This view also implements string filtering to search for a particular term.

singletheme.js

This module takes the parameter $stateParams.themeId and pulls all its artifacts from the them in data.json whose id is the same as $stateParams.themeId. It then serves the view theme.html with the artifacts as an array of json objects.

slideshow.js

This module pulls all the artifacts from data.json and serves them to the view slideshow.html which displays them. This view also implements the swiping functionality that allows a user to swipe from one artifact image to the next.

start.js

This module manages the transitions between the views load.html, enter.html and concierge.html.

This module takes the parameter $stateParams.artifactId and pulls the artifact from data.json whose id is the same as $stateParams.artifactId. It then serves the view where.html with the artifact as a json object.

This view displays the map linked to in the json object's location tag.

Editing the app's content

Themes and Artifacts

To edit either the themes or the artifacts, open the data.json file that's located in the directory:

Compassion/Compassion/www/js/modules/data

Themes

This file contains an array of json objects, each of which represents a single theme in the app. A sample theme object would be

```
{
  "title": "Practice",
  "id": "3",
  "img_path": "img/theme_3.png",
  "text": "This section presents objects that relate to daily…"
  "artifacts": [

  ]
}
```

whereby "Practice" is the title of the theme, "3" is its id, "img/theme_3.png" is the path the theme's icon on the Explore view, "This section presents objects that relate to daily..." is the text that heads the theme's view, and finally [ ] is an array of artifacts in the belonging to the theme. To add a new theme create a new json object with the same structure as the object above, add it to the array of json objects in the file, navigate to the directory

Compassion/Compassion/

and run the command

```
$ionic build
```

to recompile the app. You can then view the changes made on your localhost by running the command:

```
$ionic serve
```

To edit an existing theme, find it in the data.json file, and edit it as you see fit.

Artifacts

This is a sample artifact.

```
{
            "name": "Prajnaparamita Manuscript",
            "imageURL": "img/Theme3/20. Prajnaparamita Sutra.png"
            "id": "20",
             "location":"img/maps/India.jpg",
            "caption":"Five Leaves from an Ashtasahasrika Prajnapar$
            "text":"These five palm leaves contain sections of the $
            "audio": "https://w.soundcloud.com/player/?url=https://$
            "comparativeImages":[
            {
            "imageURL":"img/Theme1/comparativeImages/20.jpg",
            "caption":"Shadakshari Lokeshvara, Folio from a Manuscr$
            "text":"This image from another version of the Prajnapa$
            }
            ],

            "playlist":[
            {
            "url":"",
            "start":"",
            "stop":"",
                "caption":"Tibetan monks, led by His Holiness t$
            }
            ]
        }
```

1. The name is "Prajnaparamita Manuscript",
2. It's image is located in "img/Theme3/20. Prajnaparamita Sutra.png"

3. It's respective map in "img/maps/India.jpg",
4. It's overlay caption is "Five Leaves from an Ashtasahasrika Prajnapar$
5. It's text is "These five palm leaves contain sections of the $
6. The audio narration of the text is at "https://w.soundcloud.com/player/?url=https://$
7. and it's comparative images are contained in the following array:

```
[
{
"imageURL":"img/Theme1/comparativeImages/20.jpg",
"caption":"Shadakshari Lokeshvara, Folio from a Manuscr$
"text":"This image from another version of the Prajnapa$
}
]
```

To add a new artifact, create a new json object with the same structure. To edit an existing artifact, find the artifact in its theme and edit it, then navigate to the directory

Compassion/Compassion/

and run the command

 $ionic build

to recompile the app. You can then view the changes made on your localhost by running the command:

$ionic serve

Comparative images
Each artifact has an array containing json objects that represent comparative images.

```
[
{
"imageURL":"img/Theme1/comparativeImages/20.jpg",
"caption":"Shadakshari Lokeshvara, Folio from a Manuscr.."
"text":"This image from another version of the Prajnapa.."
}
]
```

"img/Theme1/comparativeImages/20.jpg" locates the image, "Shadakshari Lokeshvara, Folio from a Manuscr.." is it's overlay caption, while "This image from another version of the Prajnapa.." is the text.

To edit an existing comparative image, simply edit the field you'd like to change.

To add a new comparative image to an artifact, create a new json object with the same structure and add it to the artifact's array.

After which you should navigate to the directory

Compassion/Compassion/

and run the command

 $ionic build

to recompile the app. You can then view the changes made on your localhost by running the command:

$ionic serve

Terms

To edit the terms, open the terms.json file that's located in the directory:

Compassion/Compassion/www/js/modules/data/

This file contains an array of json objects, each of which represents a single term in the app. A sample object would be

```
{
  "term": "term D",
  "definition": "some definition"
}
```

whereby "termD" is the title of the term and "some definition" is its definition. To add a new term create a new json object with the same structure as the object above, add it to the array of json objects in the file, navigate to the directory

Compassion/Compassion/

and run the command

 $ionic build

to recompile the app. You can then view the changes made on your localhost by running the command:

$ionic serve

To edit an existing term, find it in the terms.json file, and edit it as you see fit.

Credits

To edit the terms, open the credits.json file that's located in the directory:

Compassion/Compassion/www/js/modules/data/.

This file contains an array of json objects, each of which represents a single term in the app. A sample object would be

{"paragraph":"This app is a cross-institutional collaboration, designed and developed by Clive Mudanda, Anthony Olawo, and Gary Sheng, members of CompSci 408, Duke University, with content created by Karen Lucic and her students in Art 386, Vassar College: Mengna Da '15, Claire Fey '16, Emma Jacobs '15, Lily Kaar '16, Liqiao Li '16, Benno Orlinsky '15, Jiajing Sun '15, and Catherine Zhou '15."},

whereby "paragraph" tags a paragraph and "This app..." contains the paragraph itself. To add a new term create a new json object with the same structure as the object above, add it to the array of json objects in the file, navigate to the directory

Compassion/Compassion/

and run the command

 $ionic build

to recompile the app. You can then view the changes made on your localhost by running the command:

$ionic serve

To edit an existing paragraph, find it in the credits.json file, and edit it as you see fit.

About

To edit the terms, open the about.json file that's located in the directory:

Compassion/Compassion/www/js/modules/data/.

This file contains an array of json objects, each of which represents a single term in the app. A sample object would be

{"paragraph":"Welcome to the Embodying Compassion in Buddhist Art app. This multimedia guide introduces you to Avalokiteshvara, the Buddhist bodhisattva of compassion. Download it to visit the exhibition remotely or use it as you walk through the show at the Frances Lehman Loeb Art Center, Vassar College, from April 23 to June 28, 2015. The exhibition features outstanding examples of Indian, Nepalese, Tibetan, Chinese and Japanese art, including paintings, sculptures, texts, and ritual objects. See how Avalokiteshvara took on many different faces, names, and gender identities over time, becoming Guanyin in China, Kannon in Japan, Karunamaya in Nepal, and Chenrezig in Tibet. His Sanskrit name means "Lord Who Looks Down." In East Asia, Avalokiteshvara became known as "Lord Who Perceives the Sounds of the World." In every form, the bodhisattva offers the possibility that all beings—without exception—be free from suffering."}

whereby "paragraph" tags a paragraph and "This app..." contains the paragraph itself. To add a new term create a new json object with the same structure as the object above, add it to the array of json objects in the file, navigate to the directory

Compassion/Compassion/

and run the command

 $ionic build

to recompile the app. You can then view the changes made on your localhost by running the command:

$ionic serve

To edit an existing paragraph, find it in the about.json file, and edit it as you see fit.

Appendix: Project directory

- Compassion
  - Compassion
    - www
      - index.html
      - css
        - style.css
      - img
        - maps
        - Theme1
        - Theme2
        - Theme3
        - theme_1.png, theme_2.png, theme_3.png, search.gif, loading_back.png, binocular.png, arrowhead.png, about_background.jpg, 3.jpg, 4.jpg
      - js
        - app.js
        - modules
          - data
            - terms.json, about.json, credits.json, data.json,
          - about.js, directives.js, slideshow.js, artifact.js, explore.js, start.js, compare.js, searchartifacts.js, terms.json, credits.js, searchterms.js, where.js, data.json, singletheme.js
      - lib
        - angular
        - angular-animate
        - ionic
        - angular-ui-router
        - angular-sanitize
        - ...
      - templates
        - artifact

- - - compare.html, details.html, full_screen.html, where.html, details.html, intermediate.html
  - about.html, explore.html, slideshow.html, load.html start.html, browse.html, menu.html, theme.html, credits.html, searchArtifacts.html, enterexhibit.html searchTerms.html