

# Project Testament

## Final Project and Presentation

### About this Document

Fill out this document and turn it in as part of your Final Project and Presentation submission. You will most likely want to print, sign, and scan this document, but you may use an image editor if you are able to sign your name with a digital pen.

Carefully complete each section. If this document isn't correctly filled out and submitted with the assignment, **the assignment grade will incur heavy penalties.**

### Basic Information

|   |   |
|---|---|
| <b>Course Number</b><br>(e.g., CPSC-120)                              | CPSC 411  |
| <b>Course Section</b><br>(e.g., 02)                                   | 03  |
| <b>Your full name(s)</b><br>(use the name associated with our school) | Mark Raden, Jason Angel, Jiajun Gu, Wesley Zoroya, Jesse Shaihor  |
| <b>Github Repository URL</b>  | <a href="https://github.com/2023-fall-puhp-csuf-cpsc-411/final-project-and-presentation-j-j-m-w-s">https://github.com/2023-fall-puhp-csuf-cpsc-411/final-project-and-presentation-j-j-m-w-s</a> |

### Items Completed

Clearly mark one of the check boxes in each row to confirm whether each of the following items have been completed. Carefully check each row for accuracy; Each incorrectly marked row may carry a **huge penalty on this assignment's grade and be subject to our institution's academic dishonesty policies.**

Additionally, add a **typed** description of where each item can be found in your app, and how to get there easily.

| Completed                           | Not Completed            | Item  |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | The signed and completed version of this document is present in the repo as a multi-page PDF, not several image files.  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p><b>Requirement:</b> API Based User Interface</p> <p><b>How to find:</b></p> <p><b>Storyboard</b></p> <p>Votes screen</p> <p><b>Code</b></p> <p>CatVotesViewController.swift –<br/>CatVotesViewController::loadView()</p>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p><b>Requirement:</b> Interactive Assets</p> <p><b>How to find:</b></p> <p>=====</p> <p>Asset changing by user callback:</p> <p><b>Storyboard</b></p> <p>Any screen – traverse the images or fetch/grab new ones</p> <p><b>Code</b></p> <p>CatSearchViewController.swift –<br/>CatSearchViewController::prevButtonTapped(),<br/>nextButtonTapped(), rerollButtonTapped()</p> |

|                                     |                          |  |
|-------------------------------------|--------------------------|--|
|                                     |                          | <p>CatVotesViewController.swift and CatSaveViewController.swift also have similar functionality.</p> <p>=====</p> <p>Asset changing by change of orientation:</p> <p><b>Storyboard</b></p> <p>Votes screen – change orientation</p> <p><b>Code</b></p> <p>CatVotesViewController.swift –<br/>CatVotesViewController::traitCollectionDidChange()</p> <p>=====</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p><b>Requirement:</b> Text Input and Delegation</p> <p><b>How to find:</b></p> <p><b>Storyboard</b></p> <p>Search screen – you can only type letters in the name field and decimals (allowing only one decimal separator) in the second field</p> <p><b>Code</b></p> <p>CatSearchViewController.swift –<br/>CatSearchViewController::textField()</p>            |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p><b>Requirement:</b> Internationalization and Localization</p> <p><b>How to find:</b></p> <p>App is translated into Spanish and French</p> <p><b>Code</b></p>  |

|                                     |                          |   |
|-------------------------------------|--------------------------|---|
|                                     |                          | Localizable.strings, Main.strings   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p><b>Requirement:</b> RESTful Interactivity</p> <p><b>How to find:</b></p> <p>=====</p> <p>GET</p> <p><b>Storyboard</b></p> <p>Search and votes screen – images are fetched when the screen is loaded and whenever the user clicks on the reroll button</p> <p><b>Code</b></p> <p>CatAPI.swift – CatAPI::searchImages(),<br/>votes()</p> <p>CatAPIService.swift –<br/>CatAPIService::getSearchImages(),<br/>getVotes()</p> <p>CatSearchViewController.swift –<br/>CatSearchViewController::fetchCatImages(),<br/>updateSearchImageView()</p> <p>CatVotesViewController.swift –<br/>CatVotesViewController::fetchVoteImages(),<br/>updateVoteImageView()</p> <p>=====</p> |

|  |  |   |
|--|--|---|
|  |  | <p>POST</p> <p><b>Storyboard</b></p> <p>Search screen – upvote and downvote button (respective images can then be viewed on the vote screen)</p> <p><b>Code</b></p> <p>CatAPI.swift – CatAPI::imageVote()</p> <p>CatAPIService.swift –</p> <p>CatAPIService::voteOnImage()</p> <p>CatSearchViewController.swift –</p> <p>CatSearchViewController::upvoteButtonTapped(),<br/>downvoteButtonTapped()</p> <p>=====</p> |
|--|--|---|

| Completed                           | Not Completed            | Item  |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p><b>Requirement:</b> Persistent settings</p> <p><b>How to find:</b></p> <p><b>Storyboard</b></p> <p>Search screen – the input of the text fields are saved whenever they are edited (you do not have to hit the save button), though the input is cleared if you change images</p> <p><b>Code</b></p> |

|                                     |                          |  |
|-------------------------------------|--------------------------|--|
|                                     |                          | <p>CatSearchViewController.swift –</p> <p>CatSearchViewController::loadAllPreferences(), saveAllPreferences()</p>  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p><b>Requirement:</b> File persistence</p> <p><b>How to find:</b></p> <p>=====</p> <p>Saving image file to user document:</p> <p><b>Storyboard</b></p> <p>Search screen – save button</p> <p><b>Code</b></p> <p>CatSearchViewController.swift –</p> <p>CatSearchViewController::viewToCat()</p> <p>=====</p> <p>Saving image file to cache:</p> <p><b>Storyboard</b></p> <p>Votes screen – the first image (from either the upvote or downvote image array) is cached, the rest are downloaded. Therefore even if the first image was cached and if it were to become the second element later on, it would be downloaded instead.</p> <p><b>Code</b></p> <p>CatVotesViewController.swift –</p> |

|                                     |                          |   |
|-------------------------------------|--------------------------|---|
|                                     |                          | <p>CatVotesViewController::updateVoteImageView()<br/> =====</p> <p>All the background logic is stored in<br/> CatPersistence.swift</p>  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p><b>Requirement:</b> Database persistence</p> <p><b>How to find:</b></p> <p><b>Storyboard</b></p> <p>Search screen – save button saves text field data and image file path to the DB (the images themselves are saved to the user documents)</p> <p>Save screen - the data is loaded from the DB</p> <p><b>Code</b></p> <p>CatSaveViewController.swift</p> <p>db folder</p> |

## Additional Comments

Write any additional comments for your submission here.

- 1) Jiajun Gu, the only grad student in the group, did Facebook OAuth as his grad requirement for the project. Subsequent minor issues arose from this:
  - a) After this feature was added, Xcode might ask for permission to access the “github.com” key. Enter mac password and click “always allow”. Apparently this has something to do with git and homebrew.

- b) Xcode shows a warning complaint at the top "An internal error occurred. Editing functionality may be limited...". This error does not break the program and seems to be an issue on the user end of things. See:  
<https://stackoverflow.com/questions/33456411/ios-project-showing-error-an-internal-error-occurred-editing-functionality-may>
- 2) In the rare odd instance Xcode complains about missing assets, you'll probably have to re-clone the project.

## Signature

Sign your name to attest the following statement. Only students signing below will receive credit for the assignment; If this is a group assignment, make sure everyone signs the same document.

I certify I have checked the above for accuracy and agree any inaccurate information may be subject to the department's policy on Academic Integrity / Academic Dishonesty.



Mark Raden

Mark Raden

Jason Angel

Jesse Shaihor

jiajun gu

Wd