

# Coding Style Guide

Housemates Application, Dev Team, 5/28/2022

## Front-End

- Language: Swift
- Structure:
  - Import library are all on top of file
  - Outlets and class variables are initialized on top of each class
  - ViewDidAppear() (loading logic) is after variables and outlets
  - Actions and other functions are always after ViewDidAppear()
  - Structures for receiving database content is in BackendData file
  - All customized segue is in CustomSegue file
  - All necessary styling function used globally is in DesignExtension file
- Naming conventions:
  - File names are capitalized for per word (i.e. SlideUpViewCell)
  - Class name matches the file name (i.e. class SlideUpViewCell {})
  - Variable name begins uncapitalized and capitalized for words after (i.e. var backView)
  - Function name begins uncapitalized and capitalized for words after (i.e. func updateUser())
- Variable Usage:
  - Let variables for variables that will not be edited
  - Var variables use for variables that will be edited
- Comments:
  - Explain each functions (if necessary and possible)
  - Within functions if needed for big chunks of code
- Error Handling:
  - Do-Try-catch method to handle errors running a block of code
  - Guard-let method to make sure a variable is of the right type
  - Print statements to look at error

## Back-End

- Language: Python 3.10
- Libraries: flask, werkzeug, pymysql, requests
- Dependencies: All external Python libraries kept in a requirements.txt file
- Environment Variables: Environment variables are stored locally in an env.sh file

- Structure:
  - Import all needed libraries on the top of the file
  - Files are divided into different components: request handling, database management, utilities, etc.
- Naming conventions:
  - Variable names are lowercase separated by underscores(snake case .ie get\_unvoted\_rules)
  - url endpoints and parameters are also snake case
- Variable usage:
  - Variable names are kept short and intuitive
  - Usually declared at the beginning of functions when possible
  - Would use connecting function variables (app.py and users.py) to have around the same name
- Comments:
  - Had a good amount of comments on each function to walkthrough what parts of the function did to get the output
- Error Handling:
  - Use python try-except blocks to handle errors appropriately without crashing the program
  - Error codes are used to determine different error types