Battleship

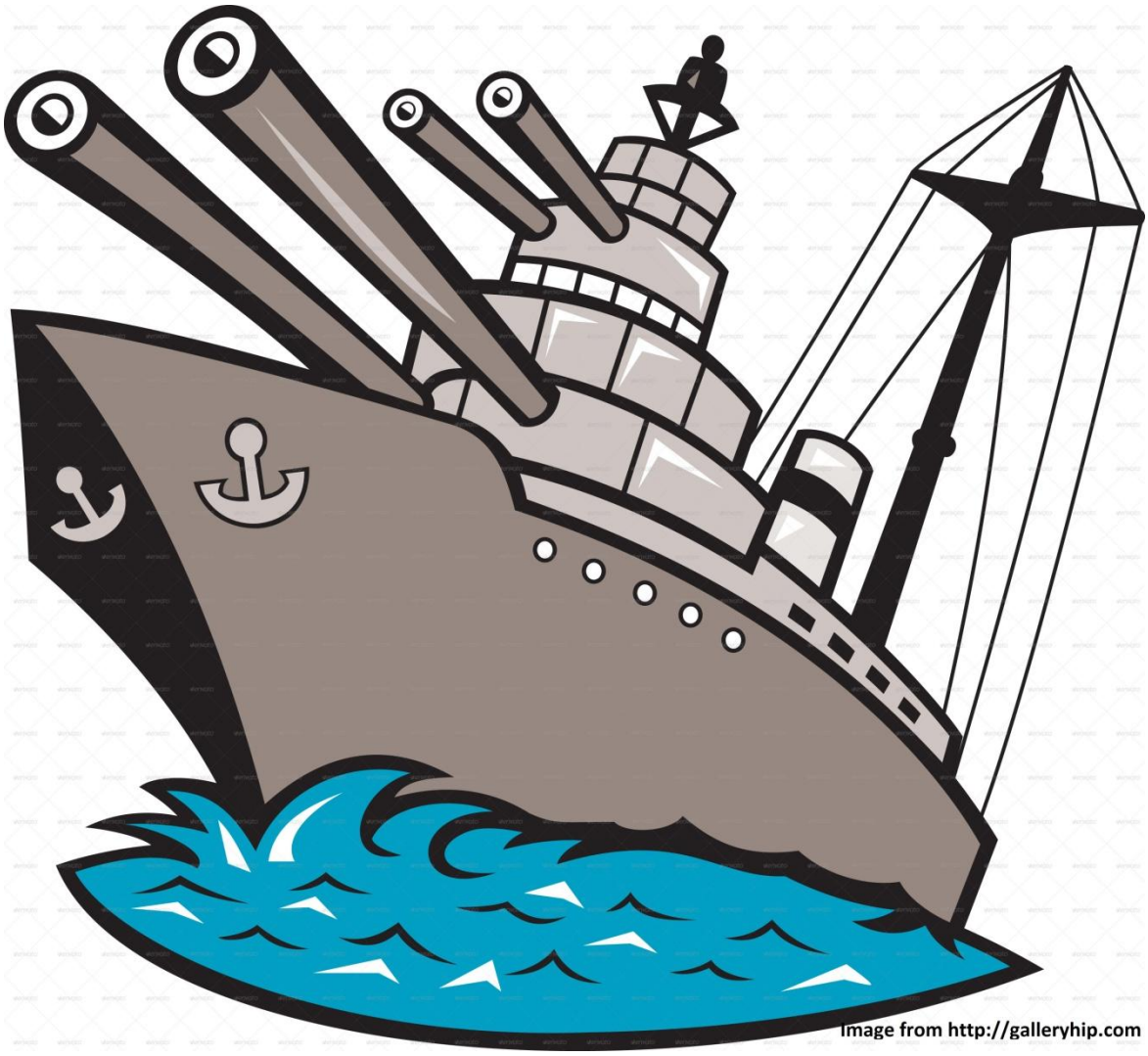

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Table of contents

Introduction 3
Technical specifications 3
Agreement writing and naming 3
Writing rules 3
Naming rules 3
Exception and particular case 3
Swing attribute 3
Special class for Model View Controller 4
Documentation 4
Class 4
Function 4
File 5
Architecture 5
Used 5
Package hierarchy 5
models 5
views 5
controllers 5
tools 6
img 6
sounds 6
Documents 6
Programming tools 6
GIT 6
UML 6
IDE 6
UML Diagrams 6

Introduction

This documents describe all inner specifications as attribute naming rules and technical tools used.

Technical specifications

Programming language:	Java
Display mode:	Graphic
Library used :	Swing
Software architecture:	Model View Controller
Documentation:	JavaDoc
IDE:	NetBeans
Versioning:	GIT
Unit test:	No

Agreement writing and naming

Writing rules

- Write in English only.
- Try not to exceed 80 characters at the same line
- File and folder are only made by lowercase (Except java class / interface etc)
- ATTENTION: always write {} in if condition, even if it has got only one line
  For instance:
  If(a==0){ return true;} //Correct
  If(a==0) return true; //Forbidden

Naming rules

- Common variables: variableName
- Arguments variables: pVariableName (Always add p before variable)
- Function: functionName
- Class: ClassName
- Setters: setAttributeName
- Getters: getAttributeName
- Constants: CONSTANT_NAME

Exception and particular case

Swing attribute

Add a short flag before attribute to note attribute instance type.

Example:

- JFrame: jf_nameFrame
- JPanel: jp_nameAttribute
- JMenu: jm_menuName
- JLabel: jl_nameLabel
- JButton: jb_nameButton
- JTextField: jtf_nameTextField

Special class for Model View Controller

When a class has a specific function in MVC architecture, its function must be added in its name. This extra word must be added at the end.

For example, a map could have its model, view and controller, then, there are 3 classes named

Model	View	Controller
mapModel	mapView	mapController

Documentation

Class

Before each class, JavaDoc must be done!

```
/**
 * <h1>ClassName</h1>
 * <p>
 * public class ClassName<br/>
 * extends ClassExtended<br/>
 * implements InterfaceImplemented<br/>
 * </p>
 *
 * <p>Description</p>
 *
 * @date
 * @author
 */
Public class ClassName extends ClassExtended implements InterfaceImplemented{
        //Code
}
```

Function

If function is private, you could add simply comment /* */ otherwise, create javaDoc with /** */

```
/**
```

```
 * Description function
 * @param nameParam description param
 * @param nameParam2 description param2
 * @return what is returned
 */
Public void functionName(){
        /code
}
```

File

Some documentation could be useful for files. (It's not a JavaDoc) Simply add at the top

```
/*
 * Class:       ClassName
 * Creation:    Date
 * Author:      Author
 */
```

Architecture

Used

MVC is used. With push model technique.
That means, when model is modified, view must be updated, which is processed by an observer like notifyObservers(Object newValue); (View implement observer interface from java and will call update (Observable o, Objcet arg);

See API for more information:
http://docs.oracle.com/javase/8/docs/api/ (Observer / Observable)

Package hierarchy

General package: com.battleship

models

Every class used for data. Models are totally reusable and no dependent with their view/controller
(See MVC pattern for more information).

views

Every class used for view. It means every Swing class will be there. A view class knows its controller

controllers

Manage the views and model. Controllers classes know their model and view.

tools

Some tools and asset used for the program. These tools could be manager for time or sounds etc

img

Image are stored in this package

sounds

Sounds are stored in this package

Documents

The documents folder, at the project root, store all data about the project. Like specifications, known bugs, updates to do and so on...

Programming tools

GIT

Versioning is managed with GIT.
The project is stored on github

- Download the project: https://github.com/FlexCaribou/battleship
- Clone project: git clone https://github.com/FlexCaribou/battleship.git

UML

Dia: https://wiki.gnome.org/Apps/Dia

IDE

NetBeans: https://fr.netbeans.org/
Sublime text: http://www.sublimetext.com/

UML Diagrams

See UML diagrams in documents folder