HAMKA

Team Panda

ASEEL BUTTO
MARYAM WAHBI
SALEH GHRAIYIB
FIRAS DAKWAR

Development Process

- System Requirements Specification (SRS)
- Software Development Plan (SDP)
  - Used Agile Methodology including scrum reports and bi-weekly meetings.
  - Game Prototype - Wireframes
- 3 Iterations

  Iteration 1. Basic Game Implementation - Model Functionality.

  Iteration 2. View (GUI) /Controller Implementation, Testing.

  Iteration 3. Game Improvements, Adding features.

Technologies

- Programming Language: Java 14
- Code Documentation: Javadoc
- Other Languages: CSS, FXML, JSON, XML
- IDE: Eclipse 2020-09 (4.17.0)
- Version Control: GitHub
- Software Project Management: Maven
- Unit Testing: JUnit4
- UI Platform: JavaFX Scene Builder 11.0.0
- Wireframing: JavaFX Scene Builder 11.0.0
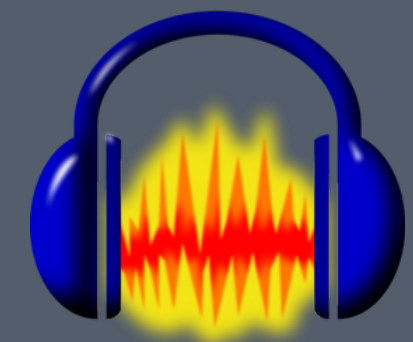- Photo Editing: Paint 3D, Procreate
- Audio Editing : Audacity

Communication Tools

- Communication: Discord , WhatsApp

- Documentation: Google Docs , Google Sheets

- Presentation: Canva

- Backup: Google Drive , GitHub

Design Patterns

TEAM PANDA

- **Main Architecture: Model-View-Controller (MVC)**
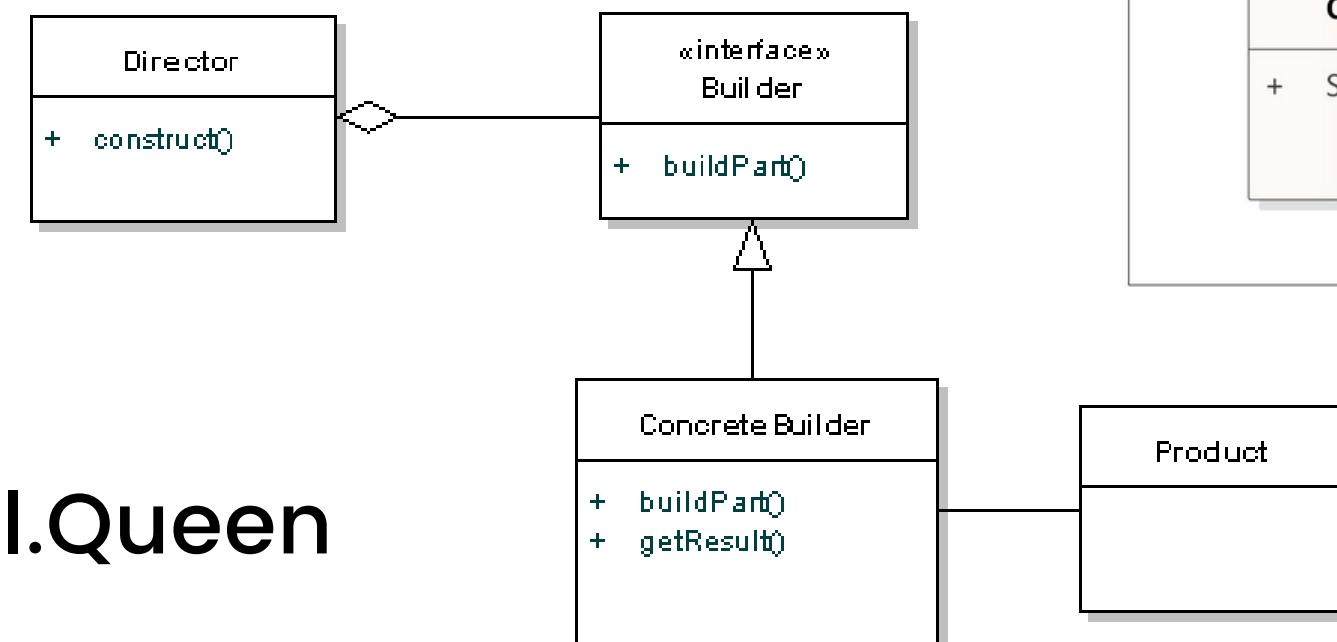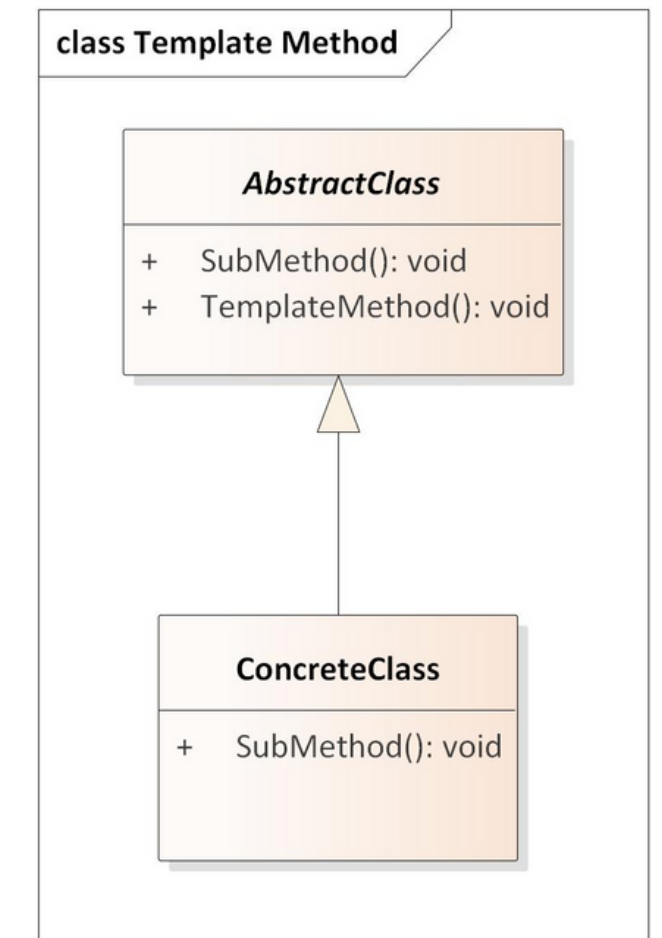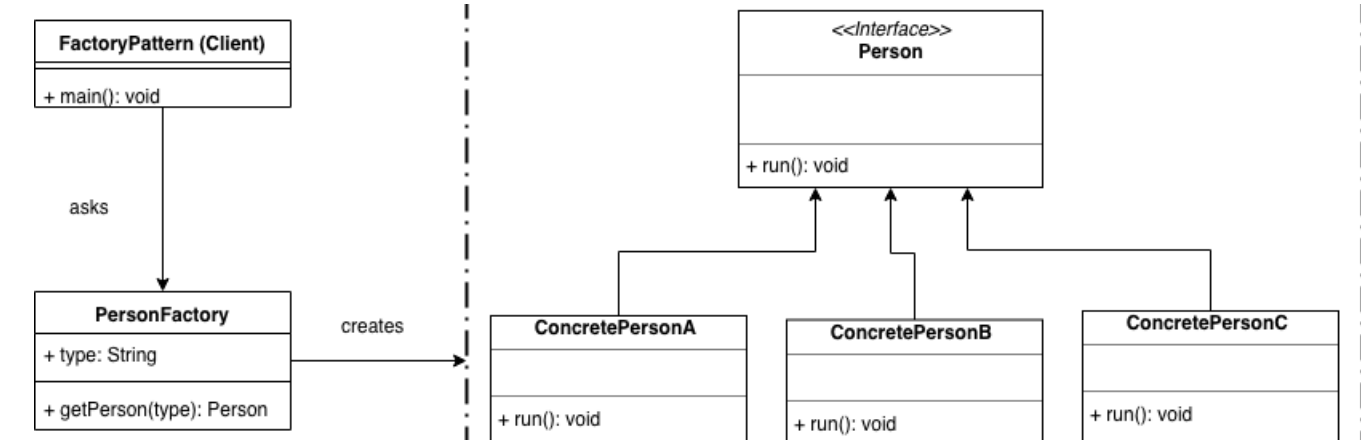
- **Singleton**

- **Factory Method :**

  @ Model.ColoredTilesFactory

- **Builder : @Model.Tile,Model.YellowTile,Model.BlueTile**

- **The Template Pattern:**

  Abstract Class @Model.Piece,

  Concrete Classes @Model.Soldier,Model.Queen

FactoryPattern (Client)

+ main(): void

asks

PersonFactory

+ type: String

+ getPerson(type): Person

creates

<<Interface>>
Person

+ run(): void

ConcretePersonA

+ run(): void

ConcretePersonB

+ run(): void

ConcretePersonC

+ run(): void

class Template Method

AbstractClass

+ SubMethod(): void
+ TemplateMethod(): void

ConcreteClass

+ SubMethod(): void

Director

+ construct()

«interface»
Builder

+ buildPart()

Concrete Builder

+ buildPart()
+ getResult()

Product

Challenges We Faced

Team Panda

- GitHub Conflicts!

- Javadoc Warnings And Errors : they're to many

- Scene Builder crashing every 5 seconds

- Music And Mute

- GUI Bugs

- Colored Tiles And Its Bugs

PUSH

But Mainly This ↓

Despite all the hurdles we learned alot :

- Teamwork makes the dream work

- Testing was something new to all of us
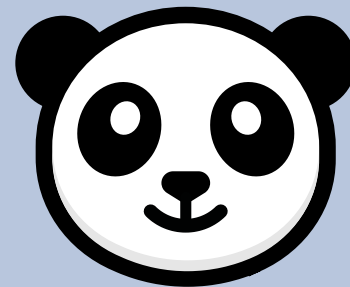
- Version Control is a champion

- Working in synchronization

- Patience

- Managing And Organizing is vital!

Team Panda

WE GIVE THANKS TO THE COURSE'S STAFF FOR SUPPLYING US WITH THE TOOLKIT TO BUILD HAMKA

TEAM PANDA