

# Project Requirements

Felgenhauer, Maximilian      Klose, Anthony  
Marten, Jameson

September, 24, 2012

## 1 Introduction

### 1. Purpose of the System

The purpose of this system is to facilitate writing Java code, by modeling class structures in UML.

### 2. Scope of the System

This system is for Java programmers and program designers.

### 3. The success criteria of the project

To create a functioning program which can diagram UML, and translate UML into java code.

## 2 Proposed System

### 1. Functional Requirements

A user must be able to create and edit UML diagrams.

A user must be able to read and write diagrams to a file.

A user must be able to generate Java code from UML diagram.

A user must be able to make UML templates.

### 2. Nonfunctional Requirements

#### (a) Usability

This application should look native to the windows or mac based on used operating system.

There should be a maximum of 2 step to create any gui element.

Program will have a Single Document Interface.

- (b) Reliability Use report instead of crashing program.
- (c) Performance

### 3 Use Case Model

#### 1. Creating UML Class Elements

- (a) Priority level Now
- (b) Participating Actors
  - User
  - System
- (c) Flow of Events
  - i. User clicks somewhere on the document
  - ii. System creates UML Class at the point on the screen the user clicked
- (d) Entry Conditions
  - User presses Edit/Create/UML Class
  - User presses Right Click/Create/UML Class
- (e) Exit Conditions
  - UML Class is created

#### 2. Editing UML Class Elements

- (a) Priority Level red
- (b) Participating Actors
  - User
  - System
- (c) Flow of Events
  - i. User right click Element/edit/{add element, remove attribute,edit element}

#### 3. Open File

- (a) Priority level green
- (b) Participating Actors

- User
- System

(c) Flow of Events

- System prompts User for a filename that exists on the System
- User picks filename
- System opens a new document with the contents of the file

(d) Entry Conditions

- User presses File/Open

(e) Exit Conditions

- User chooses filename
- User cancels

#### 4. Write File

(a) Priority level Cute Bunny!

(b) Participating Actors

- User
- System

(c) Flow of Events

- System prompts User for new or existing filename
- User enters a filename
- System save document into file on system

(d) Entry Conditions

- User presses File/Save
- User presses File/Save as. . .
- User presses Save button

(e) Exit Conditions

- User specifies a file
- User cancels

#### 5. Generate Java Skeletons

(a) Priority level OHHHHHHH Shit!

(b) Participating Actors

- User

- System
  - (c) Flow of Events
    - i. System creates java files
  - (d) Entry conditions
    - User presses File/export/Java Project
    - User presses Right click/export/Java Porject
  - (e) Exit conditions
    - System is done writing java files
6. UML Template Creation
- (a) Priority level blah
  - (b) Participating Actors
    - User
    - System
  - (c) Flow of Events
    - i. System prompt user for name of the template
    - ii. system saves current document into templates file
  - (d) Entry conditions
    - Document is not empty
    - User presses File/templates/create
  - (e) Exit Conditions
    - System finishes saving file
7. UML Template Instantiation
- (a) Piroity level Fuck it
  - (b) Participating Actors
    - User
    - System
  - (c) Flow of Events
    - i. prompt user for which template to fill the document
    - ii. if current document is not empty, system prompts the user if he/she wants to continue
    - iii. if current document is not empty, clear it

iv. fills current document with template

(d) Entry Conditions

- User presses File/templates/open

(e) Exit Conditions

- User decides to not continue
- System finishes loading template