TextVenturerTEXTVENTURER

Blog Post Summary

10. JUNI 2017

TEXTVENTURER
André Schmitt, Dominik Vogel, Simon Vollmer

TextVenturerTEXTVENTURER

Inhalt

PROJECT START

TextVenturer is, as the name implies, a Text-based Adventure.

We want to bring the retro game style of text adventures back to the present.

It will be possible to enter different scenarios, which you can discover alone or with friends.

These scenarios are saved as userfriendly readable scripts and we might add an even more easy-to-use editor for it, if we have enough time.

OUR TEAM

Like we said before our team consists of three Students. Dominik Vogel, Simon Vollmer and André Schmitt.

AREAS OF RESPONSIBILITY:

Function	Name
Implementation	Dominik Vogel, André Schmitt
Design	Simon Vollmer, André Schmitt, Dominik Vogel
Configuration Manager	André Schmitt
Tester	Simon Vollmer, André Schmitt, Dominik Vogel
Test Manager	Simon Vollmer
Project Management	Simon Vollmer, André Schmitt

We are going to use the Programming Language C++ to write our program.

First we want to implement it as a Windows Desktop Application and if we have enough time we will get a website with our game running.

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For an IDE we are going to use Visual Studio including a GitHub extension.

SOFTWARE REQUIREMENTS SPECIFICATION

We want to keep you up to date.

Here is our newest version of our Software-Requirements-Specification.

You can look at it with the following link:
https://github.com/SchmittAndre/TextVenturer/blob/master/Software-Requirements-Specification.pdf

Also, here is a UseCase-Diagram of the project:

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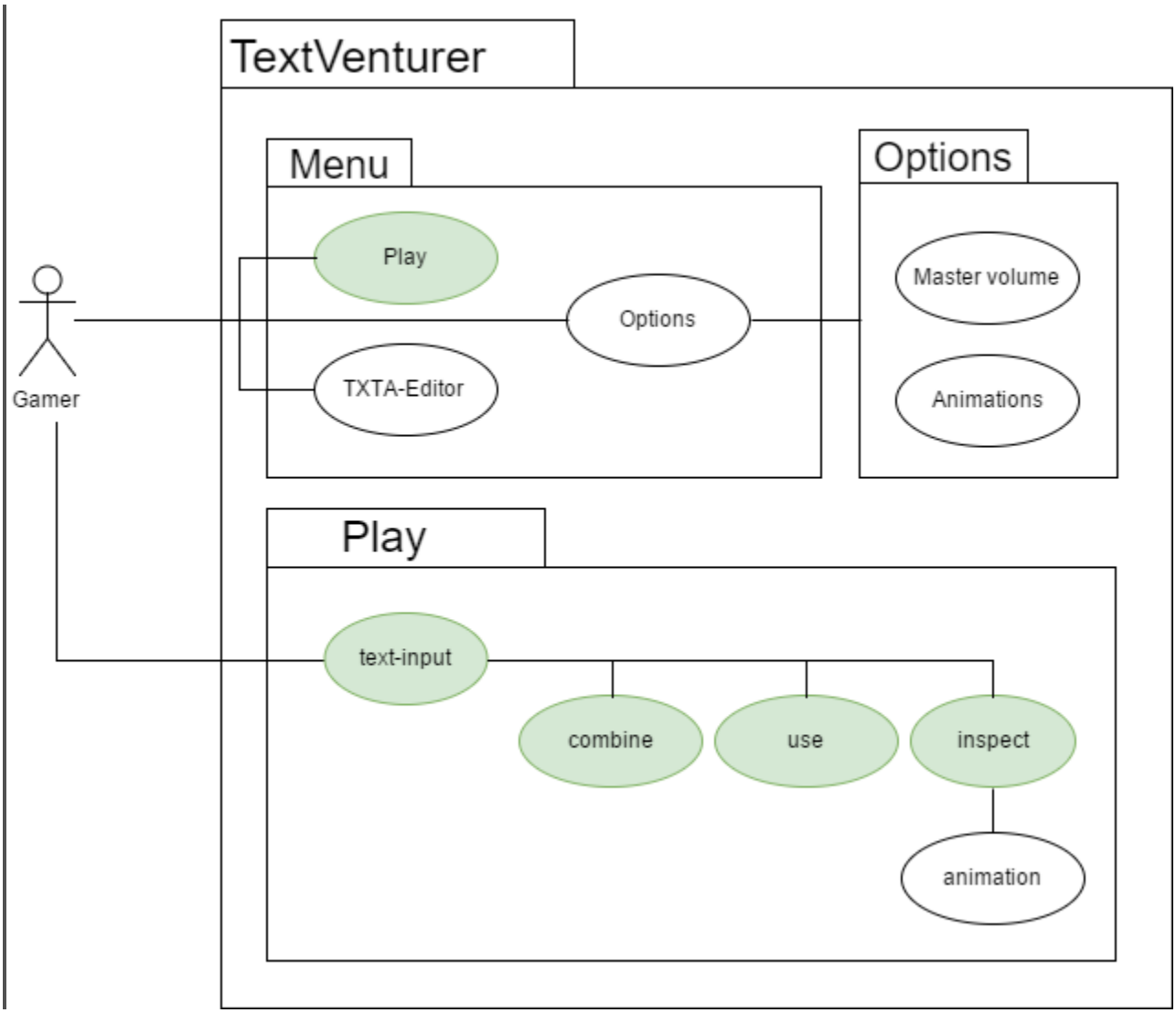


USE CASE DIAGRAMM

As you know for a Text-Adventure you need some rudimentary things like describing a room, combining things, use an Item, pick up a Item or listing your current inventory. So here are our Use Case Diagramms for these actions.

YOUTRACK

If you want to stay up to date about our TextVenturer Project you can follow us on ~~Jira~~ ~~Jira(account needed)~~. There you can see our status on what we have accomplished and all our open tasks.

edit:

Since we got problems with Jira we switched over to YouTrack. You can visit it here.

TESTING SOFTWARE

Hey fans,

we tried to find a tool to auto test the game. After hours of searching our pro programmer Dominik Vogel just started to program a self-made testing tool.

And it works!

So now we will be even faster in finishing our project and u will soon be able to test our Alpha.

If you want to see his code you can see it here:

https://github.com/SchmittAndre/TextVenturer/tree/master/InputSiumlator

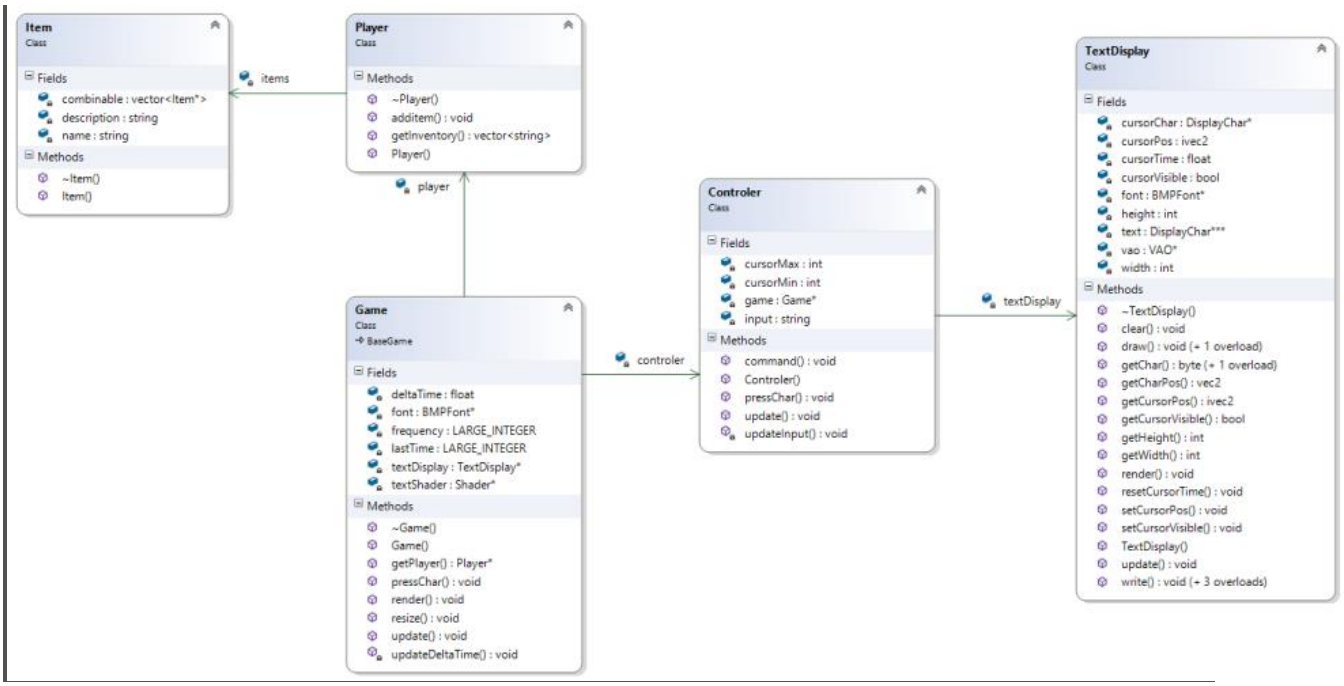
Greetings TextVenturer

CLASS-DIAGRAM (CRC)

Hey fans,

we finally got our Class-Diagram. Since we created it with VisualStudio it went without any major problems.

Now you can see how our classes work together in this awesome looking diagram.



Greetings

TextVenturer-Team

SOFTWARE ARCHITECTURE

Hey Guys,

today we want to present you our Software architecture.

You may see it here.

Greetings TextVenturer

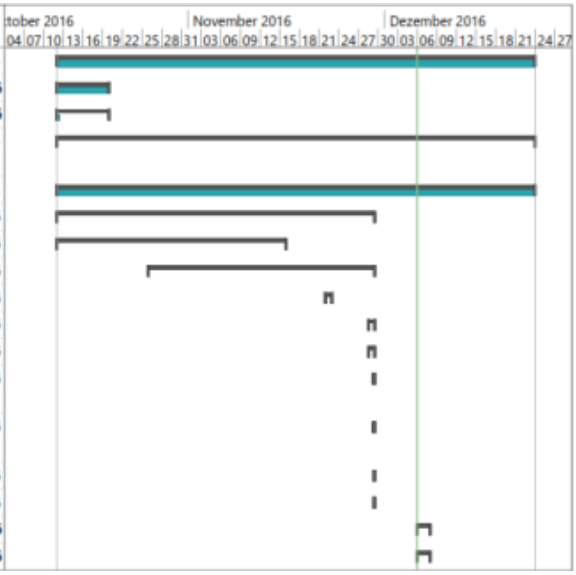
GANTT-CHART

Hey Guys,

today we want to show you our Gantt Diagram.

Big thanks to Project VNV. Without your parser we never would've gotten this chart to work.

Nr.	Vorgangsname	Dauer	Anfang	Ende
1	Meilenstein 1	53 Tage	Mit 12.10.16	Fre 23.12.16
6	Elab#1	6 Tage	Mit 12.10.16	Mit 19.10.16
7	Analysis_Design	6 Tage	Mit 12.10.16	Mit 19.10.16
11	Elab#1, Elab#2, Elab#3, Creation#1, creation#3	53 Tage	Mit 12.10.16	Fre 23.12.16
12	Analysis_Design,Story_Writing	53 Tage	Mit 12.10.16	Fre 23.12.16
25	Unscheduled	34,53 Tage	Mit 12.10.16	Die 29.11.16
26	Business Modeling,Homework	25 Tage	Mit 12.10.16	Die 15.11.16
30	Projekt Management	24,53 Tage	Mit 26.10.16	Die 29.11.16
34	Test	1 Tag	Die 22.11.16	Die 22.11.16
15	Elab#2	0,74 Tage	Mon 28.11.1	Die 29.11.16
20	Deployment,Homework	0,74 Tage	Mon 28.11.1	Die 29.11.16
16	Analysis_Design,Project Management	0,48 Tage	Die 29.11.16	Die 29.11.16
18	Analysis_Design,Project Management	0,48 Tage	Die 29.11.16	Die 29.11.16
22	Elab#3	0,23 Tage	Die 29.11.16	Die 29.11.16
23	Impementation	0,23 Tage	Die 29.11.16	Die 29.11.16
2	Creation#1	2 Tage	Die 06.12.16	Mit 07.12.16
3	Impementation	2 Tage	Die 06.12.16	Mit 07.12.16



Gantt-Chart 6.12.16

Greetings TextVenturer

MIDTERM SUMMARY

Hey Fans,

we are already halftime through and we want to show you a quick summary of what we have done so far.

Project Vision: https://textventurer.wordpress.com/2016/10/12/project-start/

GitHub Repo: https://github.com/SchmittAndre/TextVenturer

Project Management: https://textventurer.wordpress.com/2016/10/18/our-team/

Use Cases: https://textventurer.wordpress.com/2016/10/30/use-case-diagramm/

Software Requirement Specifications: https://github.com/SchmittAndre/TextVenturer/blob/master/Software-Requirements-Specification.pdf

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Test Cases: https://github.com/SchmittAndre/TextVenturer/tree/master/InputSiumlator/scripts

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Our Testing Tool: https://textventurer.wordpress.com/2016/11/15/testing-software/

Gannt Chart: https://textventurer.wordpress.com/2016/12/06/gantt-chart/

Burndown-Diagramms: YouTrack

Demo download: https://github.com/SchmittAndre/TextVenturer/releases

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Code View: https://github.com/SchmittAndre/TextVenturer/tree/master/SoftwareEngineering

Software Architecture: https://github.com/SchmittAndre/TextVenturer/blob/master/Softwarearchitecture.docx

Environmental Setup: We used VisualStudio as our IDE for our C++ programm. For visualising we used OpenGL and our Testing Tool is written in Lazarus.

Automated testing: Coming soon!

Presentation: Coming soon!

RISK MANAGEMENT

Because our Projekt and Teamwork pose various risks, we had to analyse and rank those risks. Therefore, we compiled a list of our top 5 risks:

Risk Name	Risk Description	Risk Probability of Occurrence	Risk Impact	Risk Factor	Risk Mitigation	Person in Charge of Tracking
Story Writing	Missing Creativity to write a proper story	90.00%	8	7.2	Become creative	Simon Vollmer
Knowledge-Monopole	Presentation goes wrong	80.00%	7	5.6	Talk with each other	Simon Vollmer
Compatibility with older PCs	Program doesn't work on old PC	50.00%	9	4.5	Commence testing	Dominik Vogel
YouTrack Problems	Things might go wrong with YouTrack	40.00%	9	3.6	Backup our work	André Schmitt
MS-Project only on André's PC	André gets sick/Computer Crash	20.00%	6	1.2	Install MS-Project	André Schmitt
	Everything goes wrong:	2.88%		22.1		

FUNCTION POINT CALCULATION

Today we're going to show you how we tried to predict the future using Function-Points. We want to know, how long it would probably take to implement a new feature into our Game. To do this, we rated all our old modules and calculated the so called Function-Points for it using this website: TINY TOOLS

With the results, we can then draw an averaged line, so we can simply read off the required time for new modules. Obviously this is only an estimation, and there might be a big margin, but it still gives a rough idea of how much time a specific module will take up.

Function Points Calculation

TEST PLAN

For a software, to be bug-free, is very important. Therefore we concluded all the aspects of our testing in the following document:

Test Plan

We want to make sure, that our users don't stumble upon bug after bug, killing all the fun of the game.

Our testing consists of two parts.

Normal UnitTests, which ensure, that our classes and their respective functions work flawless

Input Simulator, to test, if the adventures, writtien in the TextVenturer-Scripting language, can be completed with the correct inputs

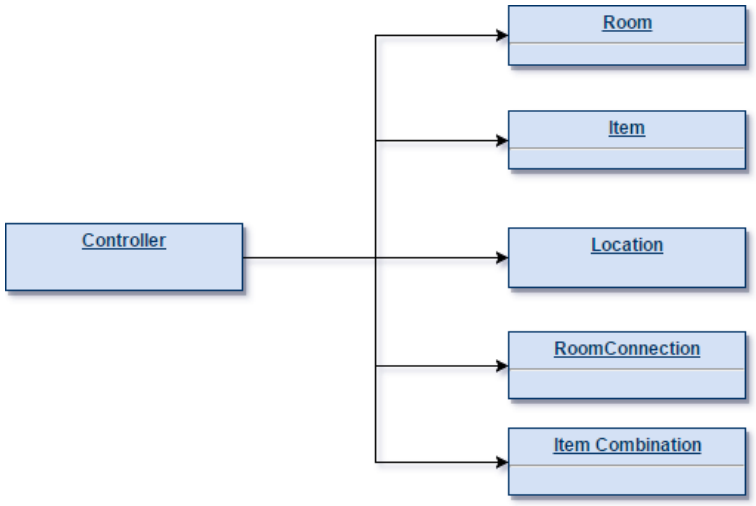
REFACTORING

The last week we tried to refactor an example-project as practice. You can see our results at our individual git repos:
Andre
Dominik
Simon

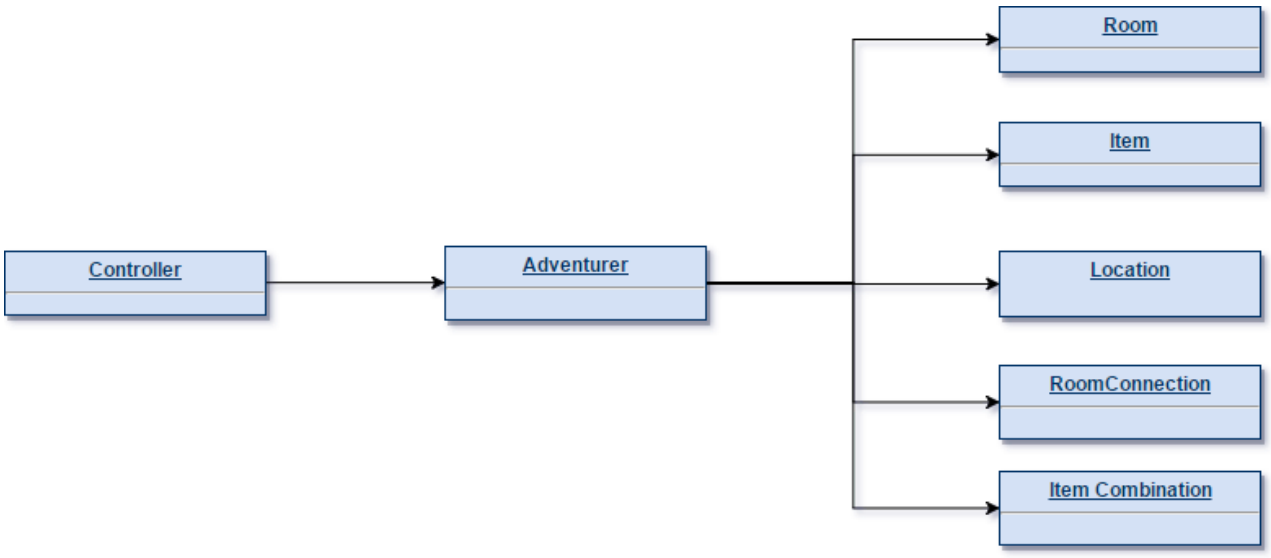
PATTERN

For a long time we wanted only one adventure in our game, but as it was getting boring quickly, we implemented a container-pattern, to contain all the aspects of the adventure into one class. This allows us to have multiple instances of this class and load or save them dynamically with ease. Furthermore you can extend that new class without the problem of it possibly getting confusing over time, if a lot of more things get added.

Simplified, our class structure, before the change, looked roughly like this:



After the implementation it now looks like follows:



Greetings TextVenturer

METRICS

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During the course of the last week we worked on metrics. Here you can see our first analysis.
As you can see, we worked with "CppDepend", which is an easy to use code analysis tool. It is unfortunately only a trial though and cost a fairly great amount of money, in case we want to keep using it. There aren't many alternatives, and all of them are also paid.

The generated TreeMap shows, that a lot of problems are coming from the loadpng header. That header is not written by ourselves, and we therefore won't change anything major in it. We need it, as the named reveals, to load the font, which is saved as PNG.

The only really "critical" problems are a few long functions, which had their reasoning, but might eventually get changed around, when we have time for it and decide to do so.

INSTALLATION

Hey Guys and welcome back to TextVenturer,

since copy pasting the contents of a zip is annoying, we finally created an installer for our game. Therefore, all you need to do, is get the newest installer here: https://github.com/SchmittAndre/TextVenturer/releases

and install the game, like you do with any other. This also allows you to uninstall it in a clean way again as well.

We hope you enjoy our game!

Greetings, TextVenturer

CONTINUOUS INTEGRATION

As we were working on our program, we realized that even though it compiles fine on one computer, it had problems on others. So we signed up at the Continuos Integration Service called Visual Studio Team Services, or short VSTS.

The Problem with this service is in fact, that it is made for companies who don't want to release their scrumming to the public eye. Therefore we don't have any way of opening it up publicly. The only way for you to take a look at it is, giving us your microsoft account name, so that we can add you as a reader.

textventurer.visualstudio.com

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FINAL

So here is our summary of the whole project TextVenturer:

- GitHub
- Youtrack
- Visual Studio Team Services

Homework:

- Project Vision
- Team Roles
- Software Requirements Specification
- Overall Use Case Diagram

- Use Cases
- Youtrack
- Automated Testing
- UML Class Diagram

- Database UML
- Software Architecture
- Gantt Chart
- Risk Management
- Function Points
- Test plan
- Refactoring
- Continuos Integration
- Pattern
- Test Coverage Coming soon
- Metrics
- Installation

TextVenturer
Software Architecture Document

Version <1.0>

Revision History

Date	Version	Description	Author
28.11.2016	1.0	First release	A.Schmitt S.Vollmer

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Software Architecture Document

Introduction

Purpose

This document provides a comprehensive architectural overview of the system, using a number of different architectural views to depict different aspects of the system. It is intended to capture and convey the significant architectural decisions which have been made on the system.

Scope

everything

Definitions, Acronyms, and Abbreviations

MVC- Model View Controller

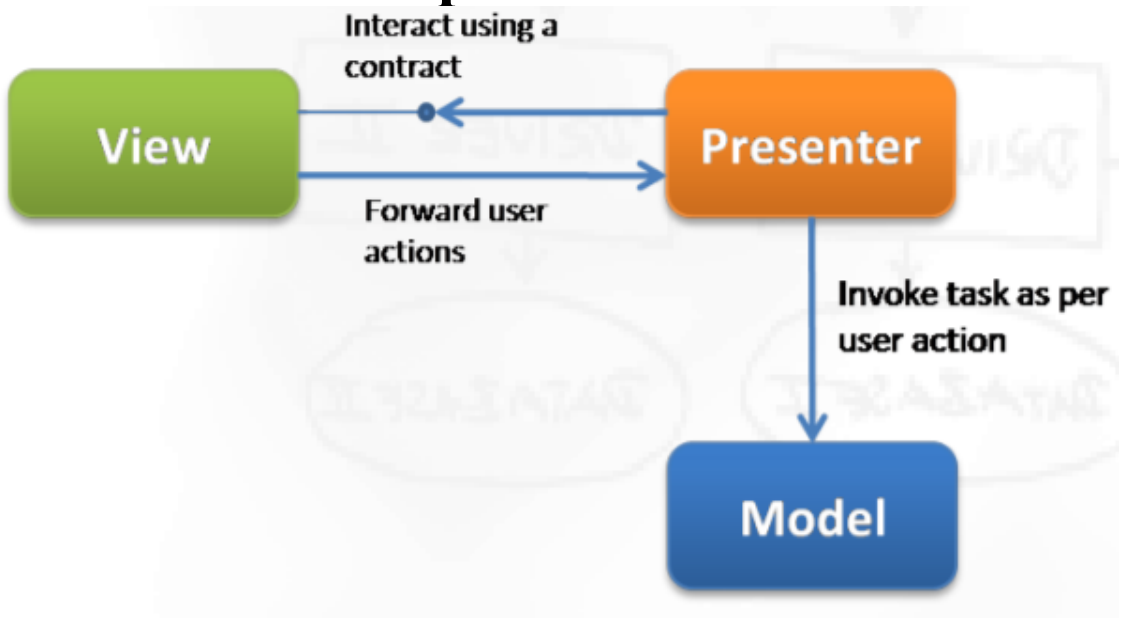
References

http://dhbwse2016.pbworks.com/w/file/fetch/113168836/03_ArchitectureReverseEngineering_2016.pdf

Overview

This document show our software architecture.

Architectural Representation



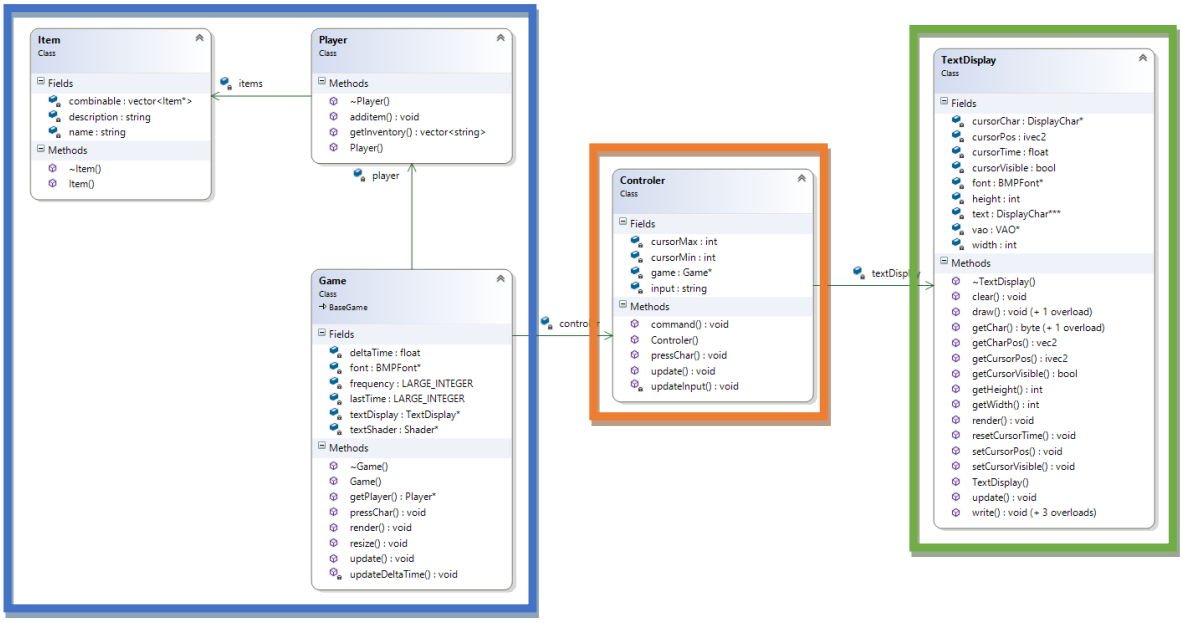
Architectural Goals and Constraints

Our System architecture is based on an easy changeability of the components like changing the “View-Class”

Use-Case View

n/a

Logical View



Process View

n/a

Deployment View

tbd

Implementation View

n/a

Data View (optional)

tbd

Size and Performance

n/a

Quality

n/a

TextVenturer
Use-Case Specification: Alias

Version <1.0>

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Revision History

Date	Version	Description	Author
<11/APR/17>	<1.0>	First Uploaded	Simon Vollmer

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Table of Contents

Use-Case Specification: Use

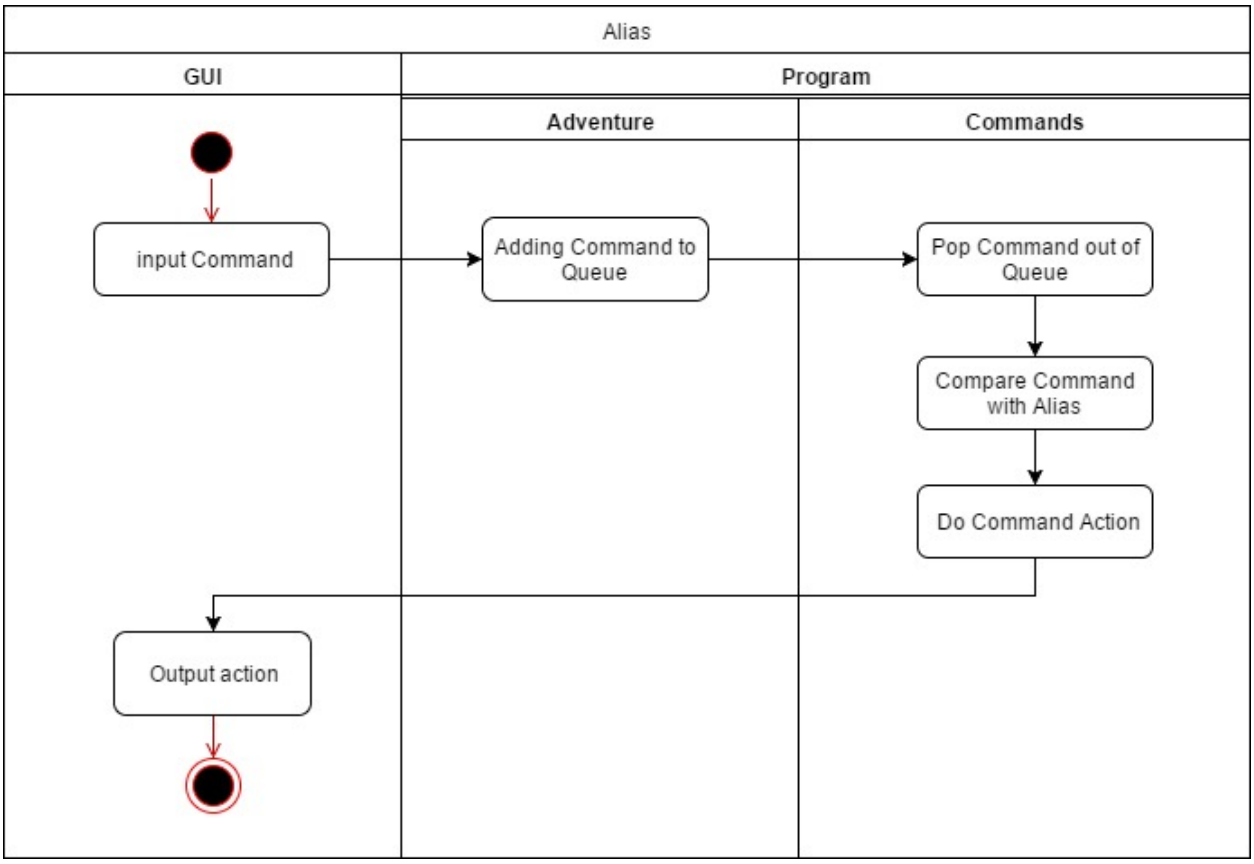
Use-Case Name

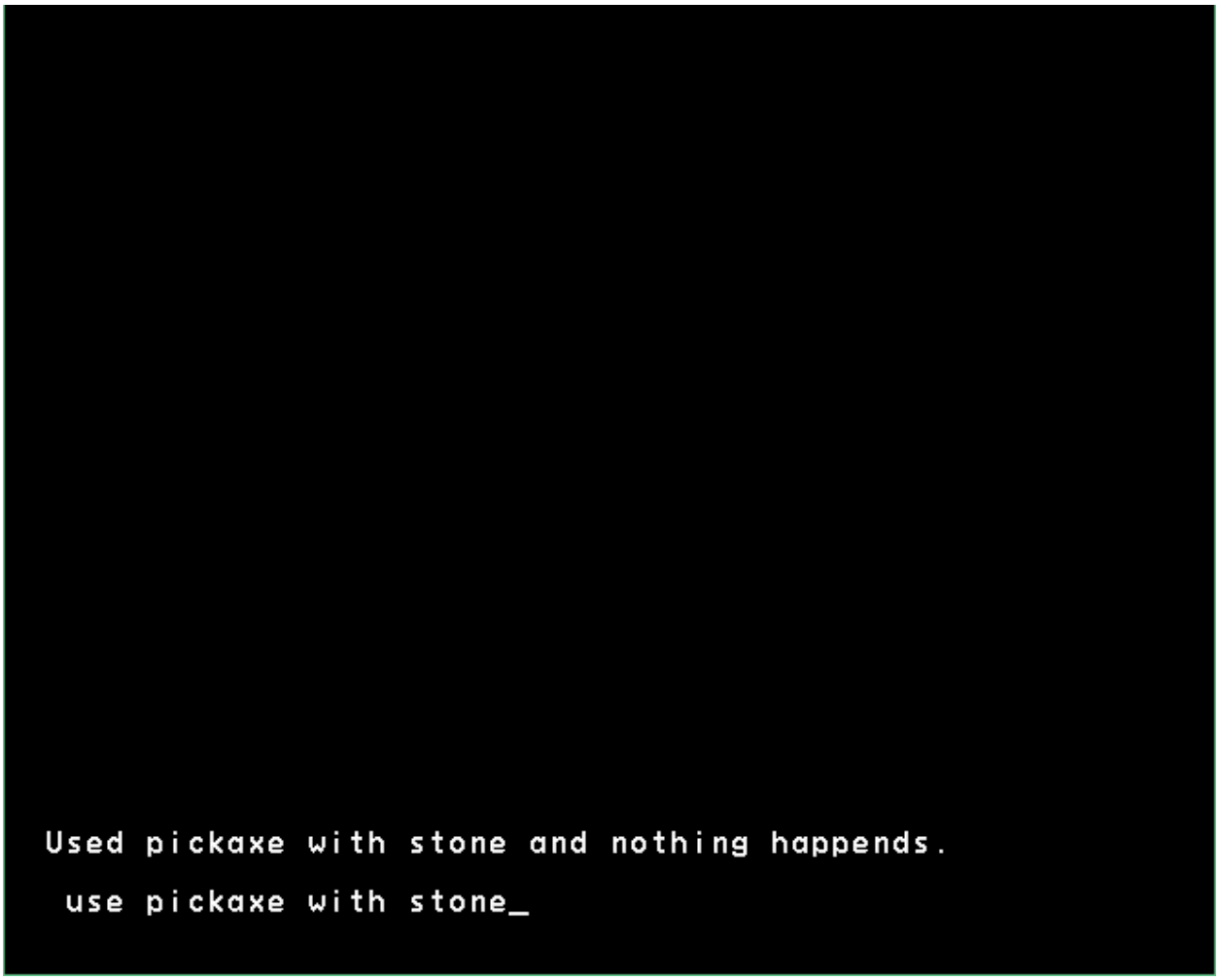
Brief Description

This is our UC Diagram which starts if you type in a command.

Flow of Events

Basic Flow





Alternative Flows

Command is not available

If the chosen Command is not available an error massage appears on the UI

Special Requirements

n/a

Preconditions

n/a

Postconditions

Wait for next input

Extension Points

n/a

TextVenturer
Use-Case Specification: Combine

Version <1.0>

Revision History

Date	Version	Description	Author
<01/NOV/16>	<1.0>	First upload	André Schmitt, Dominik Vogel

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Table of Contents

Use-Case Specification: <Use-Case Name>

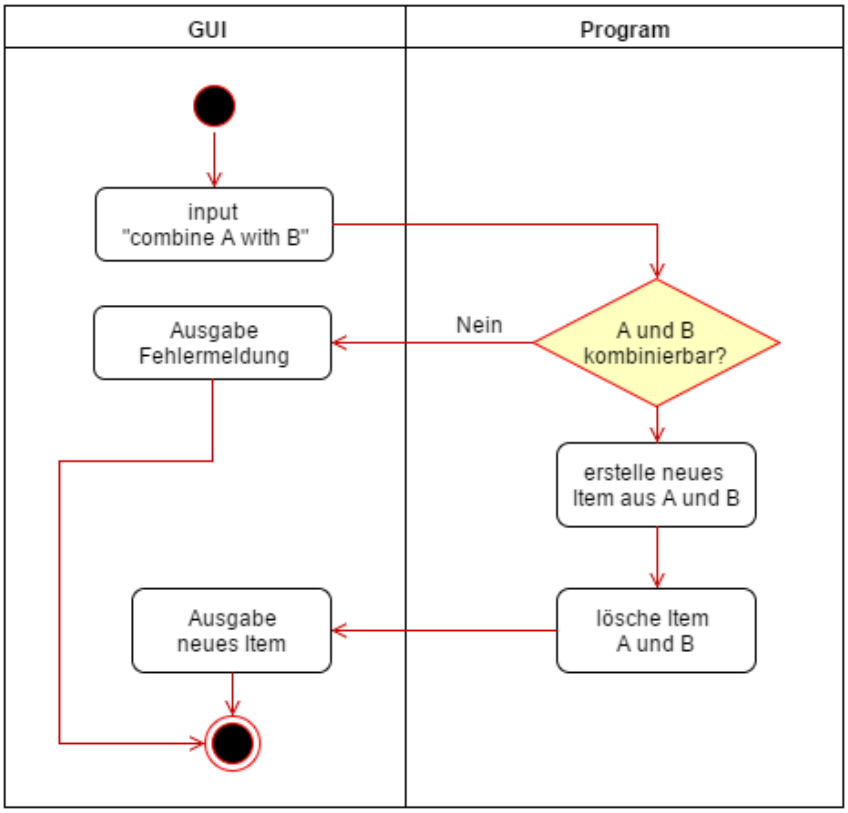
Use-Case Name

Brief Description

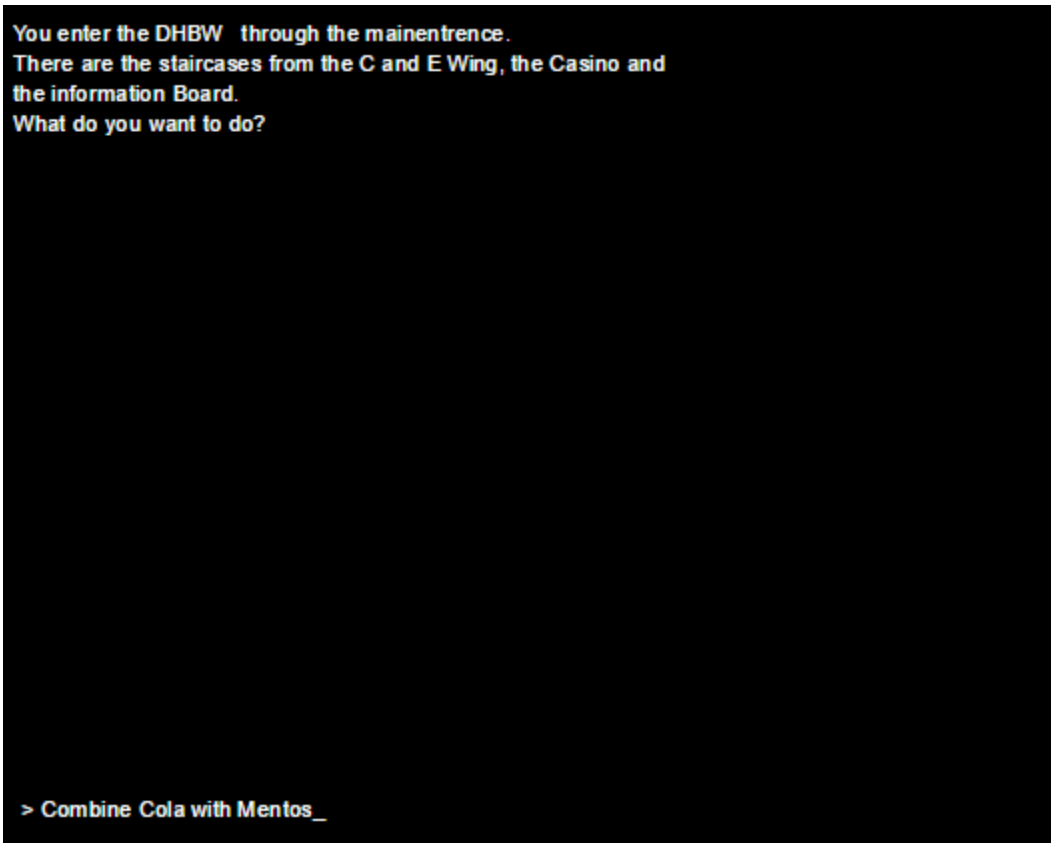
This is our UC Diagram which starts if you type in “combine $itemA with $itemB”

Flow of Events

Basic Flow



TextVenturer



Special Requirements

n/a

Preconditions

n/a

Postconditions

Show name of new Item

Extension Points

n/a

TextVenturer
Use-Case Specification: Use

Version <1.0>

Revision History

Date	Version	Description	Author
<12/DEC/16>	<1.0>	First Uploaded	André Schmitt

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Table of Contents

Use-Case Specification: Use

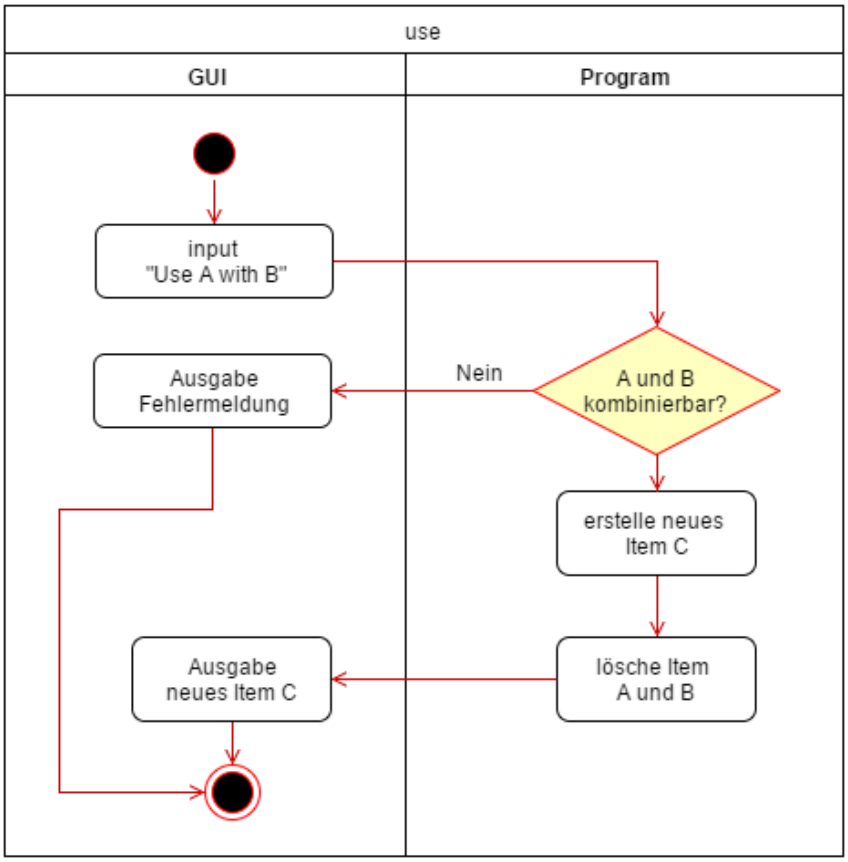
Use-Case Name

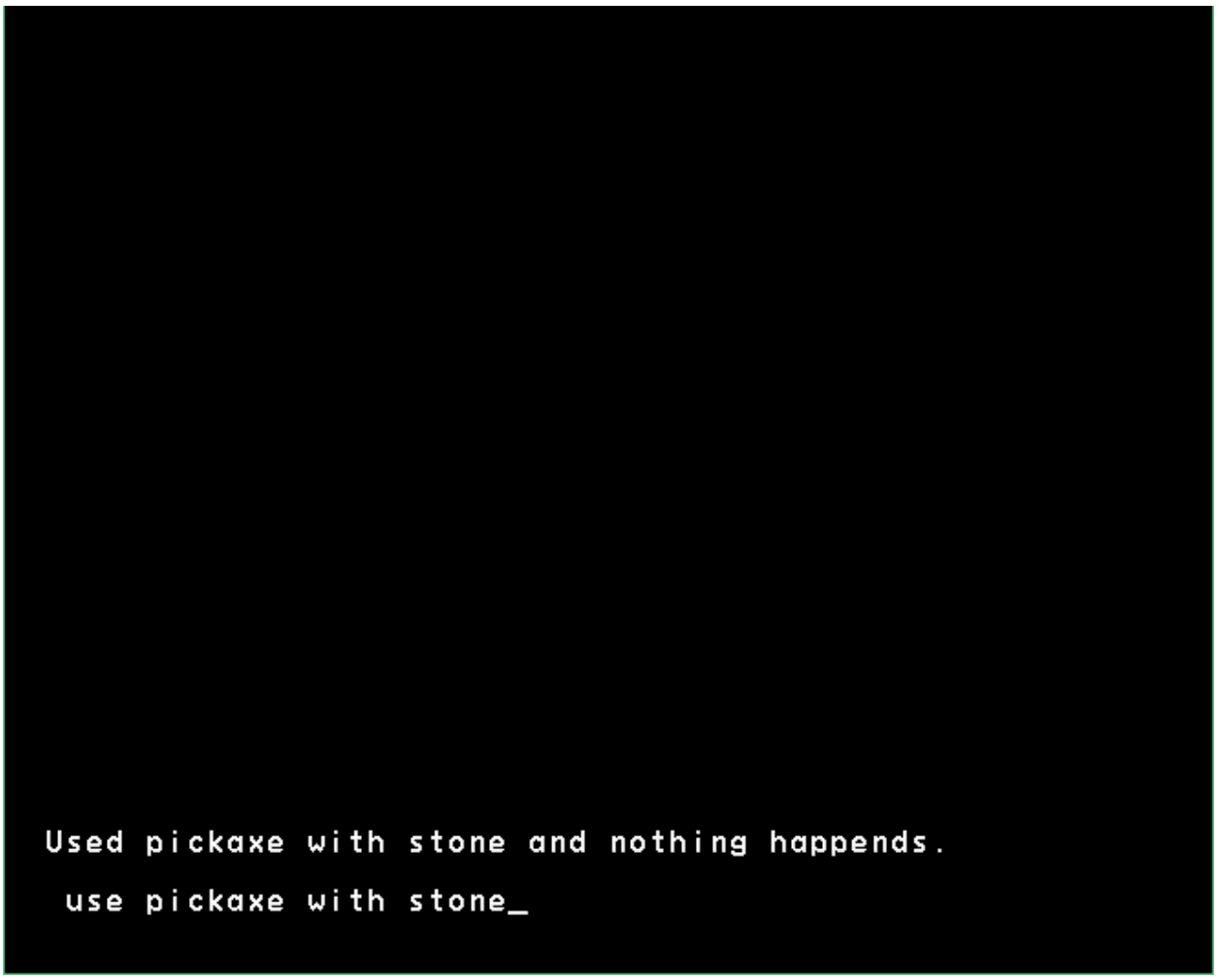
Brief Description

This is our UC Diagram which starts if you type in “use <item> with <object>”

Flow of Events

Basic Flow





Alternative Flows

Items are not combinable

If the chosen Items are not combinable an error massage appears on the UI

Special Requirements

n/a

Preconditions

n/a

Postconditions

Wait for next input

Extension Points

n/a

TextVenturer
Use-Case Specification: Pick up

Version <1.0>

Revision History

Date	Version	Description	Author
<05/DEC/16>	<1.0>	First upload	André Schmitt

TextVenturer

Table of Contents

Use-Case Specification: <Use-Case Name>

Use-Case Name

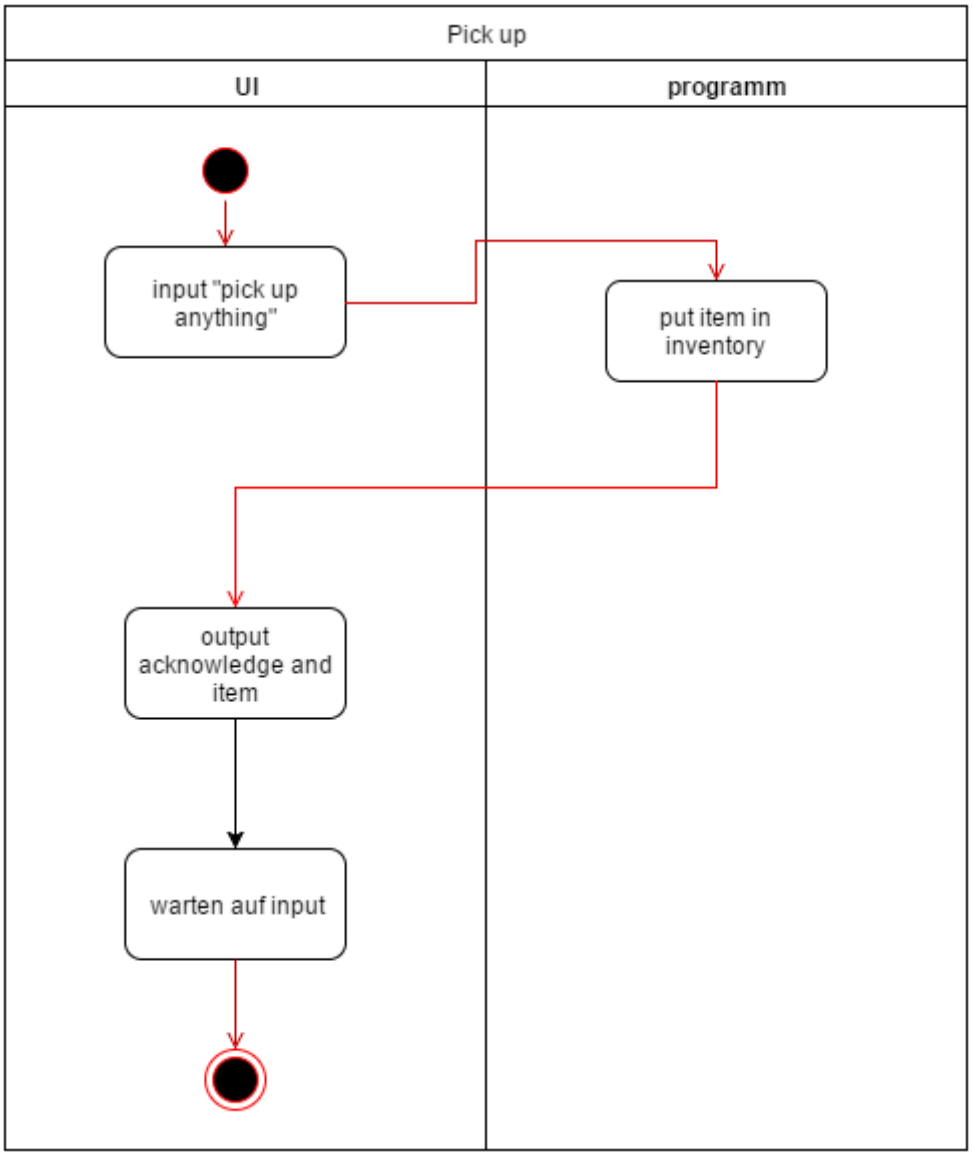
Brief Description

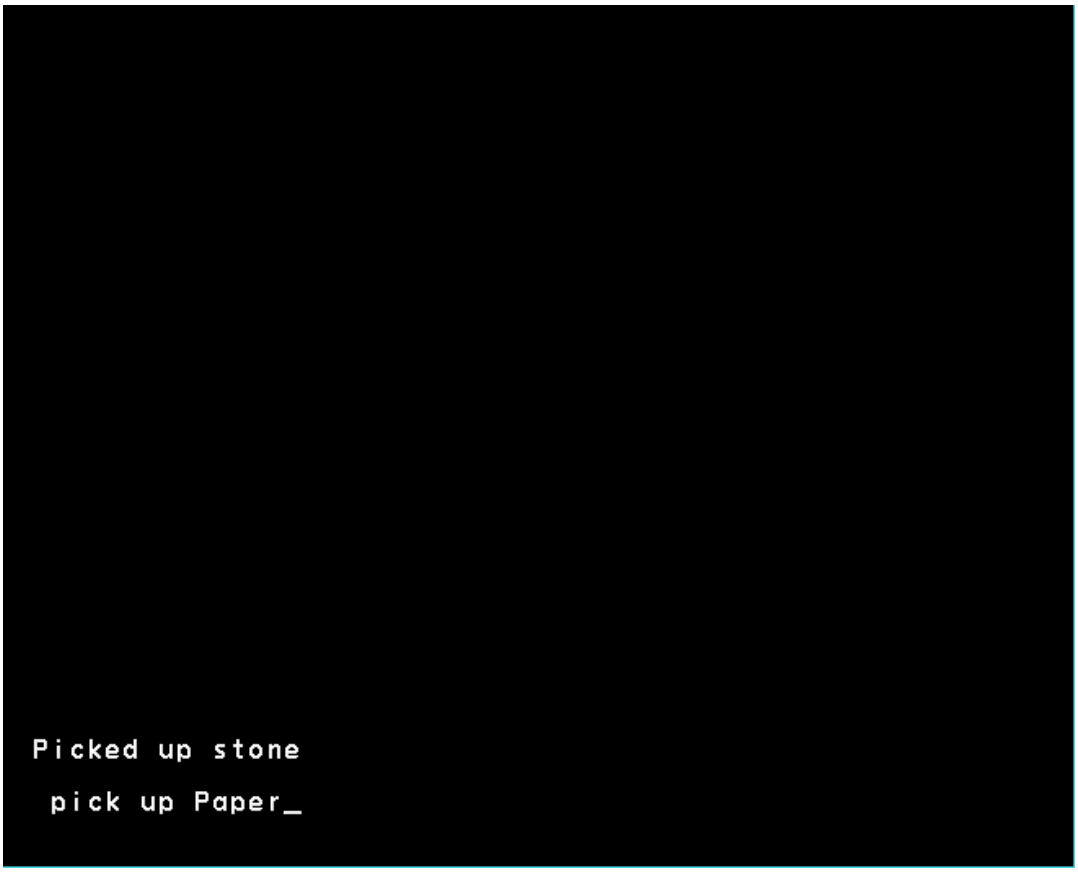
This is our UC Diagram which starts if you type in “Pick up $itemA”

Flow of Events

Basic Flow

TextVenturer





Special Requirements

n/a

Preconditions

n/a

Postconditions

Show acknowledge that you pick up sth. And what you just picked up

Extension Points

n/a

Revision History

Date	Version	Description	Author
<01/NOV/16>	<1.0>	First Uploaded	André Schmitt
<07/DEC/16>	<1.001>	Correct some things	André Schmitt

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Table of Contents

Use-Case Specification: Get inventory

Use-Case Name

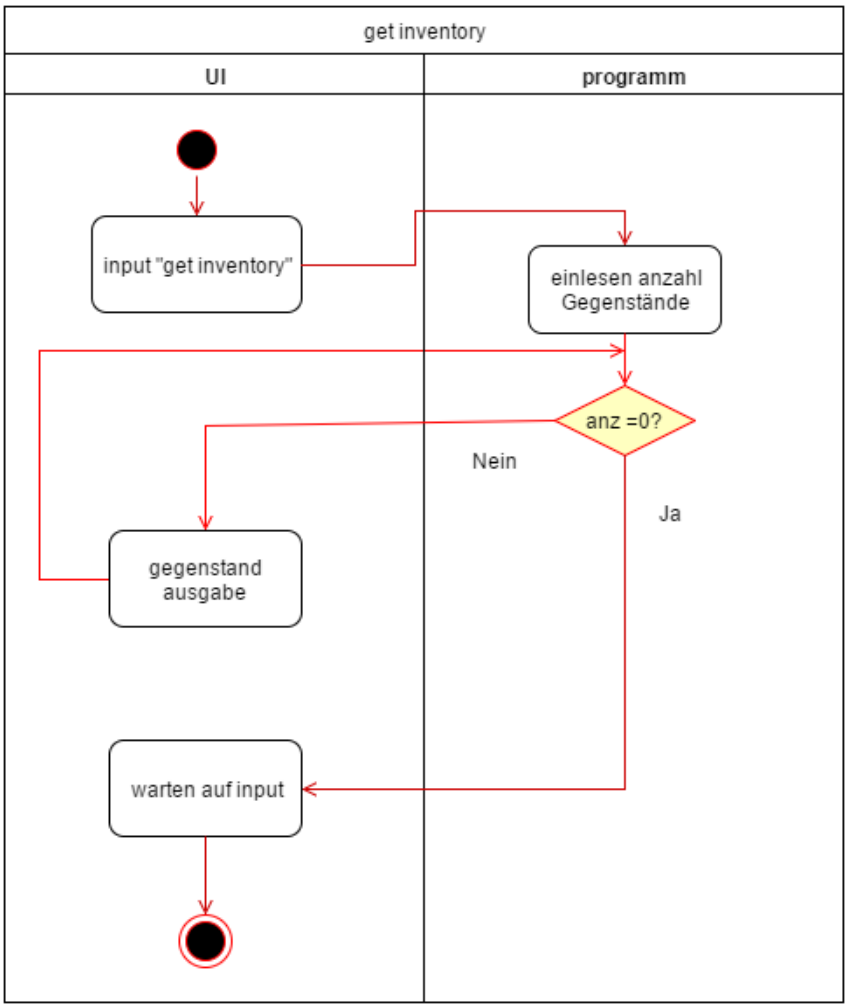
Brief Description

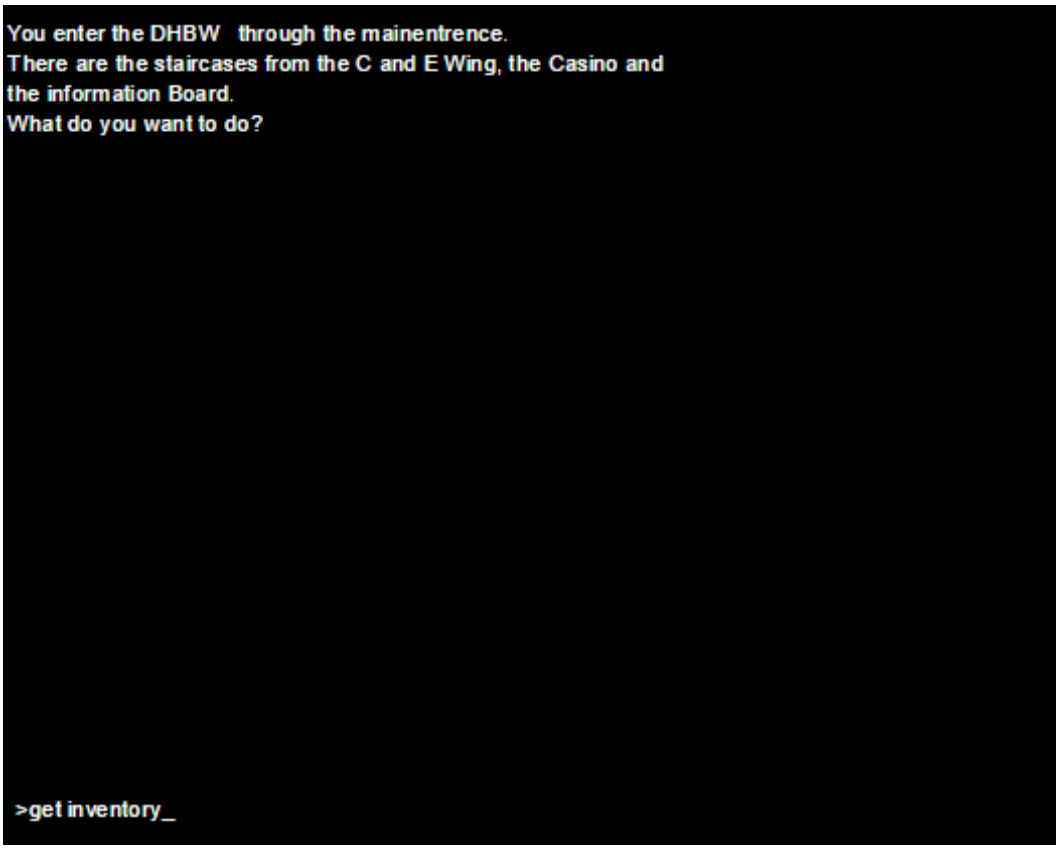
This is our UC Diagram which starts if you type in get inventory

Flow of Events

Basic Flow

TextVenturer





Alternative Flows

amount of inventory zero

If the number of things in your inventory is zero it Outputs “there is nothing in your Inventory”

Special Requirements

n/a

Preconditions

n/a

Postconditions

Wait for next input

Extension Points

n/a

TextVenturer
Use-Case Specification: Enter a room

Version 1.0

Revision History

Date	Version	Description	Author
01/11/16>	<0.1>	<UC-Enter Room>	<Simon Vollmer, Dominik Vogel, André Schmitt>

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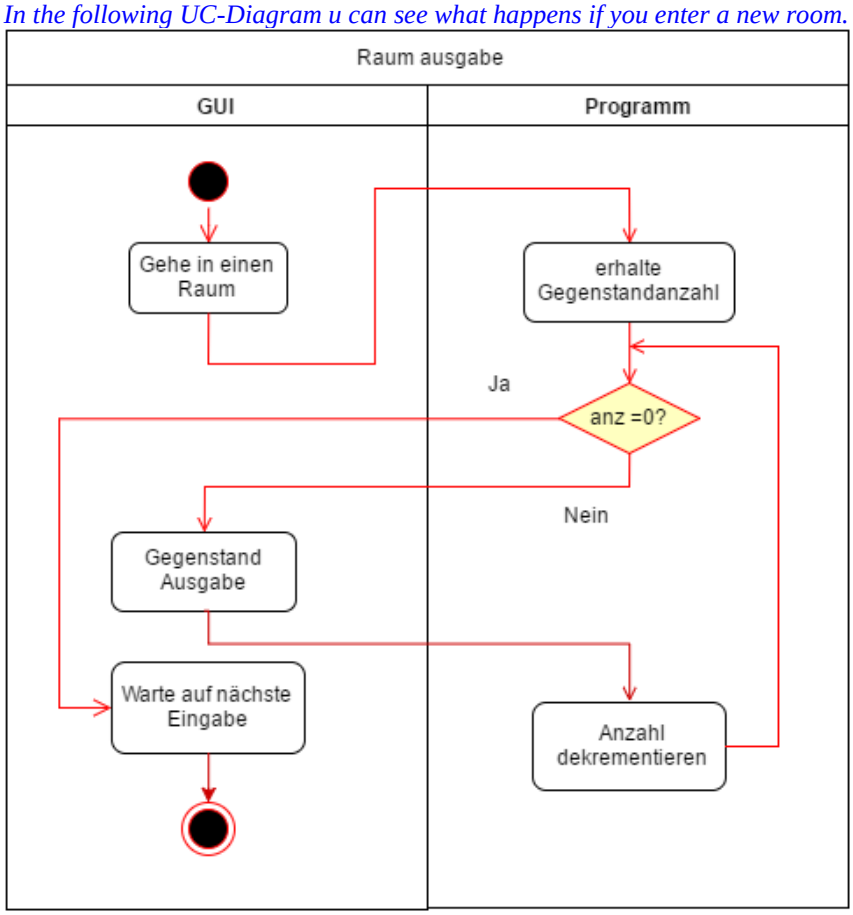
Table of Contents

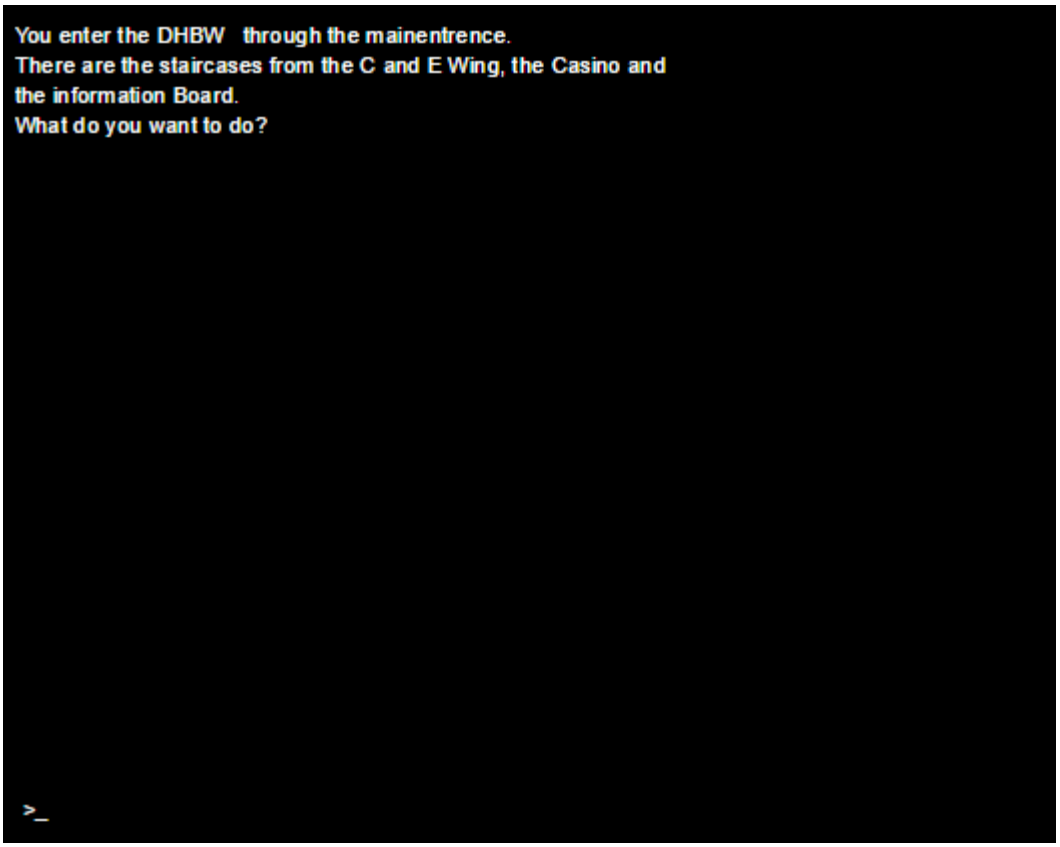
Use-Case Specification: <Use-Case Name>

Use-Case Name

Brief Description

In the following UC-Diagram u can see what happens if you enter a new room.





Flow of Events

Basic Flow

The purpose of the "Room Enter" UC is to get every information whenever you enter a new room.

Alternative Flows

n/a

Special Requirements

n/a

Preconditions

n/a

< Precondition One >

Postconditions

n/a

Extension Points

n/a