Vision and Scope

Serious Game Project at JMU University of Würzburg, by

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Vision and Scope Document

for

TypeFighter

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version

1. Business Requirements

1.1. Background

Learning how to properly type and do so fast is not a skill commonly though in school. Yet it is one that can be important to possess for many in their professional life.

1.2. Business Opportunity

Since digital media are becoming more and more important, there is an increasing need for fast typing. So a system that would enable users to learn how to type faster in a fun way could solve this problem. The users could increase their abilities in typewriting by playing several levels, which differ in difficulty. Also the ranking system and the possibility of unlocking special achievements would inspire the user to get better.

1.3. Business Objectives

BO-1: Increase typing speed of user up to a generally expected standard.

BO-2: Release Version 1.0 by 03/27/2017.

1.4. Success Metrics

SM-1: The average typing speed of rookie-users using our product for 4 weeks is increased by 50%.

SM-2: Release Version 1.0 is operational and useable for demonstration.

1.5. Vision Statement

For young people **who** want to increase their typing speed in order to be able to perform in a computer based society, the software will provide a fun and engaging way to improve. **Unlike** trying to increase their typing speed by using a simple training website or similar, motivation will be kept at a high level through the use of reward systems, highscore lists and levels varying in length and difficulty.

1.6. Business Risks

If we fail to communicate the features which separate the software from already existing products sharing the same goal, user acceptance could be difficult. The short development time could make it difficult to fix major implementation issues. This risk is increased through the developers missing experience regarding the technologies to be used.

1.7. Business Assumptions and Dependencies

AS-1: Playframework will be available (via internet).

AS-2: Availability of a keyboard for every user.

AS-3: Database will be online at operation time

2. Scope and Limitations

2.1. Major Features

FE-1: Complete different levels by hitting the right key at the right moment.

FE-2: Time for completing a level is measured to be ranked at some highscore list.

FE-3: Possibility to unlock special achievements.

FE-4: Users can become friends and send each other messages.

FE-5: An authoring tool offers the possibility to add or edit user data and levels.

2.2. Scope of Initial Release

All major features named in section *2.1. Major Features* are planned to be included in the initial release.

2.3. Scope of Subsequent Releases

There are no subsequent releases planned. However, the scalable nature of the initial design allows for low-risk opportunities for long-term monetization via customisation. Examples include unlockable skins for targets, sound-effects, backgrounds or recurring (IE daily) challenges. Higher scope examples include game-modes or premium ranking.

Including Google and Facebook integration may increase popularity and retention

2.4. Limitations and Exclusions

Any features named in *section 2.3 Scope of Subsequent Releases* are not planned to be included in the initial release in a major scope.

Due to the game's core gameplay requiring a keyboard, there is essentially no possibility to

generate a sizeable audience on platforms that do not support hardware keyboards and capable web-browsers.

The initial release will only be optimized for Google Chrome on a Windows PC, since developing and maintaining fallbacks essentially requires doubling the project scope, and exponentially increases risks for each change and update.

There is no plan to host the application online, nor to host a public database, so that there is no actual internet access to the database without vpn.

3. Business Context

3.1. Stakeholder Profiles

Stakeholder	Major Value	Attitudes	Major Interests	Constraints
developers	*getting a good grade*	*see project as opportunity to gain experience as software developer*	*finishing in time; fulfilling the greatest possible amount of requirements*	*tight schedule*
audience	*having fun*	*motivated to progress, expect rewarding features*	*ease of use, steady progress*	*must use a keyboard based system*

3.2. Project Priorities

Dimension	Driver (state objective)	Constraint (state limits)	Degree of Freedom (state allowable range)
Schedule		*release 1.0 to be available by 3/27/2017.*	*none*
Features		*All features scheduled for release 1.0 must be fully operational*	
Quality			*90-95% of user acceptance tests must pass for release 1.0.*
Staff		*team size is limited to 5 members*	
Cost			

3.3. Deployment Considerations

The initial release is accessible using a webGL- or Canvas-capable browser. The game is tuned to be played using Google Chrome and a hardware keyboard. Any device fulfilling these requirements is able to run the game, however performance heavily depends on the user's machine.

To be publicly accessible, the backend needs to run on a server. In our case, this server is not hosted online, so it will have to be run locally. Additionally, Database-Access requires VPN to Würzburg University RZUW and according access-rights.

To modify the project, the developer needs knowledge of and access to certain technologies:
JavaScript
JavaFx
The Play Framework 2.5
Java 8 and its dev environments
MySQL