First steps of the game design

Introduction

First step of the game design process is getting the idea for the game. Game design is a creative process and similar to most creative processes ideas for games are everywhere and they can be inspired by anything and anyone around you. One of the skills of the game designer is finding inspiration from ordinary things and situations. A major component of idea generation and game conceptualization is the process of brainstorming that includes dozens of various techniques. (Nacke 2014; Neidlinger 2015; Ijäs & Viitala 2017.) On the other hand brainstorming does not necessarily lead to innovation which is also acknowledged in game design (e.g. Kultima & Paavilainen 2007).

Idea processing and team forming

Nacke (2014) introduces five stages of creativity. First phase is preparation including studying the topic and problems deeply in order to gain deep understanding of the chosen area of interest. Second phase is incubation which focuses on keeping the subject matter in the mind for a while, but not consciously working toward any particular idea. After that comes insight, so called aha-moment, when idea starts making sense and works itself into a concept. After that idea will be evaluated in terms of value of pursuit, on the basis of originality, feasibility, and any potential market value. The last stage is elaboration which is the hardest part of idea processing. Elaboration means the complete formulation of idea and turning it into a solid concept. (Dörner, Göbel, Effelsberg & Wiemeyer, 2016.)

The creation of serious game most likely starts by defining characterizing goals. A clear problem statement will be defined in order to help to keep the design process and the project focused. From the very beginning, the different parties should work together. Once the game aspects are set, the development team should be formed (figure 1). Constant collaboration with the stakeholders helps to keep the design efforts on the track. (Dörner, Göbel, Effelsberg & Wiemeyer, 2016.)
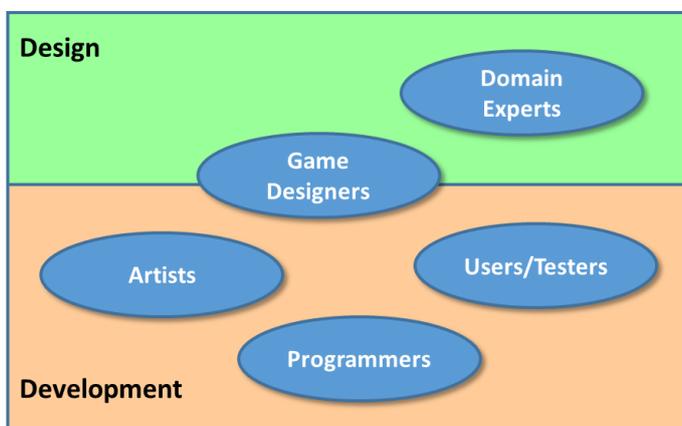

FIGURE 1. Serious games development team (Dörner, Göbel, Effelsberg & Wiemeyer, 2016)

Target group

Most serious games have a specific target group and in order to be effective the game should be crafted for the needs and preferences of the target group. When determining target audience and investigating attractive game elements for target audience, game designers should keep in mind that they do not design the game for themselves. (Dörner, Göbel, Effelsberg & Wiemeyer, 2016.)

Creating a game that fits to all types of players is impossible as well because interests of players may be manifold and even conflicting. If there are many parallel target groups or the target audience is wide, designer should concentrate on common denominators or non-conflicting features. Getting touch with the target audience is extremely important. Interviews and regular tests of game idea are good practices in the early phase of collaboration. (Dörner, Göbel, Effelsberg & Wiemeyer, 2016.)

Game Design Canvas

Game design canvas is a method for designing a game or a game level, making the work fast and predictable. The result can be, for example, a one-page canvas that is easy to share, understand and update throughout the development process. (Richard Carey Digital Media 2016.) Game design canvas is not standardized so many versions are available. Example template of canvas can be found in following address:

http://richardcarey.net/game-design-canvas/

First phase of making the game design canvas is the setup of the foundation of the game design project. This phase focuses on the intention and the players of the game. After that comes the game design part including description of mechanics, interaction, input and feedback. The meaning of game design part is to create a feel of the game experience. Other considerations of canvas include return of investment (ROI), effort, channels, platforms and positioning. (Richard Carey Digital Media 2016.)

Prototypes, demos and mockups

Prototyping is a tangible creation of product or interface concepts. It is used as a qualitative and iterative tool at different levels of development in various design fields. Especially the form of rapid paper prototyping is essential in game design. Prototype represents the game core game mechanics on an abstract level, and the rule system of the game without narrative, audio and visual overlays with digitized interfaces. (Dörner, Göbel, Effelsberg & Wiemeyer, 2016.)

Prototyping is a way of avoiding the expensive and risky situation of starting the production too early. Prototyping makes it possible to test gameplay experience and mechanics in different stages of the development. Like the process of game design, prototyping is an agile and iterative process allowing quick changes. (Ijäs & Viitala 2017.)

Low-tech prototypes are common in the early phases of the development making it possible to play at least part of the game. Low-tech prototypes aid the design work. Making of those can not take too long and those can not be too expensive. Examples of low-tech prototypes are post-it notes, board game, dramatization or fast and rough implementation with computer. Ensuring the functionality of the game is the most important goal of low-tech prototyping. (Ijäs & Viitala 2017.)

Concept demo is an interactive demonstration, a partly implemented game that is used in, for example, presentations and evaluations. Concept demo describes the proceedings of the process. The main goal of concept demo is to deliver the main ideas of the game concept. Concept demo is a main tool when seeking funding for the game development. That is why concept demo has to deliver at least one main idea of the game comprehensively. (Ijäs & Viitala 2017.)

Mockup is either a scale model or full-sized model of how some device or digital solution looks like. If some testable functionality is added, it is again called a prototype. (Ijäs & Viitala 2017.) Mockups are used by designers mainly to get feedback from users. (Wikipedia 2017.) Several tools exist for making mockups.

Motivation

Games motivate players in different ways. In the case of serious games development it is important to understand whether the motivation is intrinsic or extrinsic. If the motivation comes from the game itself and not from from an external source, it is called intrinsic motivation. Otherwise the motivation is extrinsic. Developers of serious games need to think this but the answer is not straightforward. If serious game is mainly used as a motivational tool, the game provides extrinsic motivation to its players that might not have intrinsic motivation with a topic. (Dörner, Göbel, Effelsberg & Wiemeyer, 2016.)

Motivation is closely related to player types. Bartle (1996) has published a model consisting of four player types that are killer, achiever, socializer and explorer. Nowadays these types are called Bartle types. Because different players are attracted to different games based on various demographic (e.g. age and gender) and psychological factors (player type), examining player types can have important role. Designers need to know what type of players are most likely to be attracted by the game and whether the same players match the intended target audience. (Dörner, Göbel, Effelsberg & Wiemeyer, 2016.)

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