

Wonder document

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Tag Story

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Motivation

Traditional handheld gaming focus on interaction between the player and the gameplay or in multiplayer online games the cooperation or competition between the different players. Even though many application are using the built in sensor technologies of today's mobile phones, such as accelerometer's, gyroscope and global positioning system (GPS), not many games utilizes these for orientation in or navigation through physical space. Tag Story aims to be an active outdoor game where the players has to solve tasks, alone or with your team, interacting with the real environment in a fun and engaging manner, by means of the mobile phones built in technology such as accelerometer, gyroscope and GPS and near field communication (NFC). It will not be possible to succeed in this game while stayed glued to the screen, since your mobile phone only mediates your actions on to the environment, or identifies a part of the environment for you, making it possible to engage with it.

The Tag Story application uses NFC, implemented as radio-frequency identification (RFID) tags, which are situated along an physical outdoor route. To be able to progress to the next step in the route, the players have to solve puzzles using mobile technology, e.g. virtually chopping wood, by using the embedded accelerometer. Completing the tasks will in turn reveal new RFID-tags in your traveling route enabling you to progress from your current position towards the final puzzle. In this way a predetermined narrative unfolds as the puzzles are solved, taking the players to different physical places as they create their own virtual adventure story, moving through their surroundings trying to reach the end of the game. (* Publishing your route and solution to the adventure on the Tag Story web site will be optional).

Tag Story has the opportunity to be a successful family activity, since the game will be interesting to different ages with diverse interests (e.g. outdoor hikers as well as mobile gamers). The ability to bridge the gap between these different activities, by merging them and thereby creating a new experience, making it even more fun to be outdoors or playing games, than either of the activities alone.

Existing solutions

Tag Story will be similar to an adventure book unfolding a narrative to it's, readers where they at a given point in has to chose among the next alternative narrative to pursue, making a written trail through the story as it unfolds from start towards the end. A similar real life game using mobile technologies already exists. However, this game doesn't have a narrative element unfolding as a story. Geocaching (geocaching.com) is a free real-world outdoor treasure hunt. Players try to locate hidden containers, called geocaches, using a smartphone or GPS and can then share their experiences online.

Prototype

Tag Story aims for social contributions by the players, and their ability to give feedback and share tips throughout the narrative will be crucial for it's success in the long run. The already existing feedback on a given route could mean great help in completing the quest for the current players (* Sharing as well as downloading hints and tips will be optional in the full game). Additionally, it

should be possible for players to read as well as write their own RFID tags, thereby enabling them to create and upload their own stories to the Tag Story website. However, social sharing as well as creating new stories belongs to a fully functional game, and will not be implemented in the initial prototype. The first working prototype of the game will solely be based on a static textual story, leaving out other media types such as pictures and sound for the time being. A preliminary functional indoor prototype of the game will be tested by the Tag Story developers by the 1st of October, while an outdoor version of the same application will be ready for testing by the 14th of October by a team consisting of acquaintances (and friends) of the developers.

Marketing

Cooperation with Den Norske Turistforening (DNT) could possibly be a rich source for spreading the application as well as stimulating people to making trips in the Norwegian scenery.

Technology

The Tag Story application will be written in Java for the Android mobile platform since (some) of the developers has previous experience with the development environment. At the time being the major competitor to Android, the Apple iPhone, has no NFC sensor making it useless for our purpose. For mobile devices without NFC-sensors, Quick Response code (QR code) could work as a complementary solution, since almost all mobiles contain cameras with scanning capabilities. JavaScript Object Notation (JSON) will be utilized as project format mainly because of its lightweight nature compared to other data-interchange formats such as Extensible Markup Language (XML). This is part of the project's focus on energy efficiency and green information technology profile. Locally on the Android platform the data will be stored in a SQLite database while on the web-server MySQL will be used.