The Mystery of Gaia: Adventure Game using artifact to enhance the experience

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1 Introduction

Adventure Game (AVG) is a type of game where the player uses input and selection commands to play the game. The interface of the adventure game is usually presented in a dialog box, where selections are made using keyboard of joystick to decide the action of the main character and the plot of the story.

To increase the interest in the game, this project, The Mystery of Gaia, combines the RFID sensors with the mystery of the adventure game. The player can do hands on search of items in addition to use reasoning and search clues to accomplish the fun of game playing.[1]

2 Game Design Methodology

"The Mystery of Gaia" system employs physical artifact that a player can enhance the experience during playing the game. The resulting prototypes contained the following components:

● Art and Style Design
● Interactive Design

2.1 Art and Style Design

The art design of this project is based on the European style at the end of the 19th century and integrating elements of Greek mythologies to create magical and mysterious game features. To create the characters, they are based on the personality, profession, and image using a Japanese comic style. In terms of game scene, European baroque style architectures are used, using magnificent visual elements such as color, lighting, and sculpture to emphasis the features of the game(seeFigure 1).

Fig.1　Art and style design

2.2 Interface and Interactive Design

Game interface mainly be designed in the dialog box(seeFigure 2), which allows players to search for and communicate with NPC (Non-Player Character). Player have to find things through a dialogue with NPC and collect enough clues in order to continue the next section of the game.

Fig.2 Game Interface

The game offers record feature that allows players to save the clues. By storing the props,

allows player to continue the game, until the main puzzle be solved in the story.
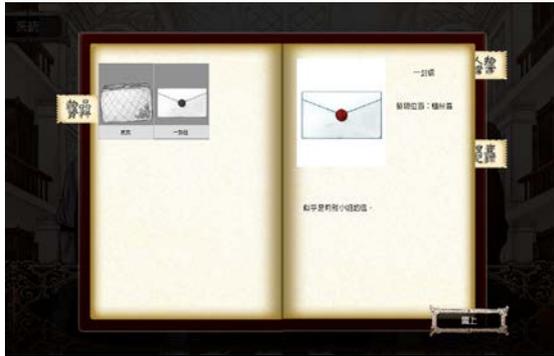
Fig.3 Record feature of the game

This game uses the PC as its platform and uses FLASH Action Script 3.0 for program design. This is combined with the Arduino circuit boards and RFID sensors to create key props, serving as the interactive sensing props that integrated the virtual and reality (see figure 3). Through that key, the player must find the correct key to active the sensing devices to open the gates of each level to continue the game.

Through the interactive design of this game, the players can control using the virtual (window selection method) and through interaction with reality (prop sensing) by hands on operation mode to play the game. The player can have more possibilities through use of interactive interfaces to raise the level of fun while playing the adventure game.

Fig.3   Using RFID sensors to create key props

3. Future Development

This game was exhibited in a new generation design exhibition in Taiwan in 2013. After analyzing audience feedback, we discovered that the game can be combined with many forms of electronic sensors, such as electronic compass, light and dark sensor, and sound sensor to let the player enjoy a multiple level of experiences in these types of games.

4.Conclusions

The main approach for entertainment for the gaming player is through the interface. The adventure game player usually is entertained through immersing in the twists of the game plot using traditional virtual dialog boxes. If one can use an intuitive approach of using physical objects, such as the key of this game that is combined with RFID sensing or other electronics sensors, then more diversified interactive approaches can be used to play the game. We believe that this will increase the level of entertainment of players.[2]

References

[1] BILL MOGGRIDGE. "Designing Interactions", In The MIT Press(2007) p. 272–273.

[2] George J. Schafer, Keith Evan Green, Ian D. Walker. "Designing the LIT KIT, An Interactive, Cyber-Physical Artifact Enhancing Children's Picture-book Reading", Interaction Design and Children 2013, New York City.