User Interface & User Experience Design of World War II Firearms in PlayerUnknown's Battlegrounds Game

D Albar
Department of Visual Communication Design, Universitas Komputer Indonesia.

Email: deni.albar@email.unikom.ac.id

Abstract. The PlayerUnknown's Battlegrounds video game or known as PUBG is a shooter type game that is well known by video game enthusiasts both on computer platforms (Personal Computers) and Mobile Phones. In the PlayerUnknown's Battlegrounds video game there are various types of firearms used in the game, some of which are firearms during World War II. The view and experience given in using these firearms in video games gives players a different image than modern firearms for players. How players perceive the visual appearance and experience of using World War II firearms is something interesting to discuss. The perception of World War II firearms being considered outdated and inadequate compared to modern weapons is a questionable factor in influencing the course of this video game. In this study using a pre-experimental method. This method was chosen to identify the initial description of the user interface and user experience perceptions related to World War II firearms in the game. This method is applied by selecting a group of player respondents to be conditioned under certain conditions so that they can provide conclusions regarding the user interface and user experience. The results showed that from the experience of the players, on average they had a perception that World War II weapons were old weapons and tended to replace them with modern weapons even though it did not affect the way of playing and the outcome of the game. Likewise, from the appearance aspect, the perception that firearms with materials that look old affect the feelings of the players in playing this weapon. The conclusion is that the User Interface (UI) and User Experience (UX) of firearms from World War II in the PUBG game are strongly influenced by the image of the firearms from outside the game itself, such as movies or the fame of the weapon from the media circulating and perceived by the public.

1. Introduction
The PlayerUnknown's Battlegrounds or known by the acronym PUBG is an online video game that can be played via smartphones or computers (Personal Computer). PlayerUnknown's Battlegrounds (PUBG) is a shooting video game. PlayerUnknown's Battlegrounds (PUBG) is a game in Battle Royale mode. The Battle Royale game mode is a mode where there are 100 players on an island to fight until they are the only person or group that survives and becomes the winner. Recently, a new game addiction PlayerUnknown’s Battlegrounds (PUBG) is becoming very popular. It is a multiplayer
shooter game where up to one hundred players fight in a battle royale and the last person or team alive wins. One can play the game with either friends or unknown people. Most of the gamers are addicted to this game and spend an excessive amount of time playing this game [1]. In the PlayerUnknown's Battlegrounds (PUBG) game there are various firearms that can be used in the game. The weapons that can be used in the PlayerUnknown's Battlegrounds (PUBG) game world vary widely, ranging from long and short-barreled firearms, sharp or blunt weapons, explosives and even wok to hit. The weapons in the game also vary in terms of type, such as various fictional weapons that do not exist in the real world, advanced firearms that mimic the real world, as well as firearms during World War II (WWII). These weapons can be played by players with various advantages and disadvantages. The visual appearance and the experience of using these weapons in the game are interesting things to discuss. Especially the mixing of the use of various types of weapons in one game. This of course can be a thought, what players feel when using these weapons, especially old firearms from World War II that collide with other sophisticated weapons. In Figure 1 below is a display in the game world where players are trying to fight to stay alive during the game with the existing loot items.

Recently, a new game addiction PlayerUnknown’s Battlegrounds (PUBG) is becoming very popular. It is a
multiplayer shooter game where up to one hundred players fight in a „battle royale‘ and the last person or team alive wins. One can play the game with either friends or unknown people. Most of the gamers are addicted to this game and spend an excessive amount of time playing this game. Recently, a new game addiction PlayerUnknown’s Battlegrounds (PUBG) is
becoming very popular. It is a multi-player shooter game where up to one hundred players fight in a ‘battle royale’ and the last person or team alive wins. One can play the game with either friends or unknown people. Most of the gamers are addicted to this game and spend an excessive amount of time playing this game.
Recently, a new game addiction PlayerUnknown’s Battlegrounds (PUBG) is becoming very popular. It is a multiplayer shooter game where up to one hundred players fight in a ‘battle royale’ and the last person or team alive wins. One can play the game with either friends or unknown people. Most of the gamers are addicted to this
game and spend an excessive amount of time playing this game.

A lot of research on PUBG has been done. From various studies on PUBG there are several differences. The research related to PUBG includes Shweta Sunil's research entitled “Impact of PlayerUnknown’s Battlegrounds (PUBG) on mental health”, their study aimed to conceptualise and summarise the impact that gaming platforms like PUBG can have on an individual’s mental health. [2]. The next research from Hilal BALDEMİR entitled “PUBG Mobile as The New Face of Digital Gaming Addiction”. This study also focuses on mental addiction [3]. Another research by Raghvendra Kumar Vidua entitled “Suicide linked to PUBG video gaming: A case report”, it’s report a college student who committed suicide by hanging when scolded by his parents for playing PUBG on his mobile phone and whose parents would not provide the internet pack recharge for it. [4]. Piotr Galka's research entitled “How Randomness Affects Player Ability to Predict the Chance to Win at PlayerUnknown’s Battlegrounds (PUBG)”. This paper discusses how random factors affect player ability to predict the chance of winning the video game PlayersUnknown’s Battlegrounds (PUBG) which is a genre of the Battle Royale online video game. [5]. Sidra Shoaib's research entitled “Impact of PUBG Game Addiction on Social Isolation and Narcissistic Tendencies among Gamers” The current research aimed to explore the relationship of PUBG game addiction with narcissistic tendencies and social isolation in gamers [6].

The purpose of this study was to determine the extent to which the user interface and user experience designs contained in firearms in the game The PlayerUnknown's Battlegrounds. The method used is the Pre-Experimental method, this method is used to describe how gamers respond to the questions in this study such as What do players emotion when they find WWII firearms?; What do players think & visualize when they find WWII firearms?; How easy & usefull is it for players to use WWII firearms in the game?; What do players do when they find another firearm while holding a WWII firearms?. Firearms in the PUBG game have different functions as in the real world. Firearms have their own image either as assault firearms, sniper weapons or indoor firearms. With the complexity of firearms in the real world, it turns out that firearms in the PUBG world are not spared. Firearms with an old look like World War II firearms are often considered obsolete and left out of the game. What is experienced by the players regarding the use of firearms is interesting to study more deeply.

Due to the considerable numbers of weapons, each of the weapons has different capabilities. New PUBG players may have difficulties selecting a suitable weapon to beat another weapon while playing the game [7]. Firearms in the PUBG game can be obtained from the start after jumping in Battle Royale mode. Weapons are given to players from the start and the ability of weapons are predefined but it can be enhanced partly as the game preceeds. Some special skills are trainable with respect to the classes that the user selected [8]. In the game there is a user interface (UI) and also a user experience (UX). User interface (UI) is anything that is designed to be an information device, in which user can interact with. This can include the display screen, keyboard, mouse, and desktop display. This is also how users interact with apps or websites. This growth of dependency leads many companies that focus on web applications and mobile apps to place a higher priority in UI in order to improve the overall UE [9]. While User experience (UX) is the art of a product design planning so the interaction with completed products will be as great as possible. This includes the interaction with end-user on a several IT systems including the interface, graphics and design. Both elements are very important for
product and work together. But apart from their professional relationship, the role itself is very
different, referring to the very different part of the process and the discipline design [10]. The user
interface (UI) and User experience (UX) in this study are more focused on the World War II firearms
contained in the PlayerUnknown's Battlegrounds (PUBG) game. User Interface is more closely related
to Graphic Design where the display element is an important part of the User Interface, while User
Experience is more on the side of experience gained from the players related to the technical things
they experience while carrying out activities.

2. Method
The method used in this study used a pre-experimental design research approach. Pre-Experimental
Design research is research that deliberately manipulates one or more variables in a way that can affect
these variables, but this Pre-Experimental Design has little or no control over existing variables so it is
possible to influence the variables unwanted results [11]. Experimental and quasi-experimental
research designs examine whether there is a causal relationship between independent and dependent
variables [12]. In this study, the use of the experimental method is a must so that you can see firsthand
the experience made by the players when playing the game.

In this study, observations were made on players while playing the game PlayerUnknown's
Battlegrounds (PUBG) as Phase 1 to identify player reactions. Participants were observed as many as
10 people in 10 games. The players who are the respondents are in the average age of 19-20 years.
This was chosen from the maturity of the respondent's thinking so that it is hoped that the answers can
be in-depth and the PUBG game itself which is intended for 1G+ without parental control, so that this
age is considered appropriate. There are not many conditions settings that can be done in the game
because the game is controlled by the system, so that the World War II weapons in the game can be
found in areas that are not known or traversed by the observed player. Players are observed from how
they play the game and what players do when they find World War II weapons in the game.

After the player has finished playing the game, the next stage is carried out. Phase 2 by
conducting interviews on events when players get the opportunity to use World War II firearms. Some
of the questions that were asked were the following:
1. What do players emotion when they find WWII firearms?
2. What do players think & visualize when they find WWII firearms?
3. How easy & useful is it for players to use WWII firearms in the game?
4. What do players do when they find another firearm while holding a WWII firearms?

3. Results & Discussion
From the stages that have been carried out, the following results are obtained: Players feel various
things when they find firearms from the era of World War II. The most common feeling is that 60% of
the players are happy only on the condition that when they find a weapon as the first firearm they find
after the jump. Players don't carry any weapons when they jump, so players don't care what kind of
weapons they find as long as they can be used to survive in the game. Perceptions of insecurity are
manifested to the person involved as fears of losing their lives, loss of property, loss of social
relationships, or losing control over their lives [13]. For 20% of players feel normal, because basically
many other weapons are scattered when looking further. 10% feel disappointed because they feel that
the firearms found are not what players expected. Figure 2 below show the percentage of emotions of
players when they find firearms from the World War II era when they first hold a weapon after the drop.
Regarding what players visually think when they find World War II firearms, players convey different things. The data shows that most of the surrounding players feel that World War II firearms look old and uncool, while some feel cool for certain types of firearms. Around 70% of players feel that World War II firearms look old and outdated. While about 30% still feel cool to bring in the game. The figure 3 below shows the conditions players think about WWII firearms.

Visually, the most preferred world war era weapon is the 60% Thompson firearm, followed by 30% with the Kar98k Rifle and 10% DP-28 rifle. The results of the interview show that Thompson’s weapon or known as the ‘Tommy Gun’ is visually preferred because it looks dashing and has a reliable image and is even widely used in mafia films, so that this image that is often attached makes Thompson’s weapon in the PUBG game considered to have excellent abilities and looks good to use in games. Instead the weapon, popularly dubbed the “Tommy gun,” became infamous during the U.S. Prohibition era [14]. For the Kar98K Rifle or Karabiner 98 Kurz visually preferred it looks like a sniper in general and many players don’t know it as an old weapon just from the visuals. The DP-28 rifle is not so popular because it looks flimsy visually with its appearance that uses a large magazine circle attached to the top. Figure 4 shows data about preferred WWII firearm in PUBG.
For problems related to the ease and usability of using firearms during the World War II era in the PUBG game. Technically, the average player states that it is easy to use but is quite disturbed by its effectiveness in the game. The Thompson is considered the most equally used when compared to more modern weapons. For weapons such as the Kar98K, it is considered less effective due to limited shooting speed, while the DP-28 has problems with changing its bullets which require too long a duration. When compared to modern firearms according to their respective classes, game developers provide attribute values that are not much different. Like the speed value in killing the opponent, it is generally the same or not too far away. But of course this is not only related to numbers or quantitative values, but there is the image factor of the weapon that greatly affects the players. Figures 5 to 10 show a comparison of the values given by game developers regarding the abilities of World War II weapons with more modern weapons.

**Figure 4.** Favorite PUBG WWII firearms

![Image of WWII Firearms Preference Chart]

For problems related to the ease and usability of using firearms during the World War II era in the PUBG game. Technically, the average player states that it is easy to use but is quite disturbed by its effectiveness in the game. The Thompson is considered the most equally used when compared to more modern weapons. For weapons such as the Kar98K, it is considered less effective due to limited shooting speed, while the DP-28 has problems with changing its bullets which require too long a duration. When compared to modern firearms according to their respective classes, game developers provide attribute values that are not much different. Like the speed value in killing the opponent, it is generally the same or not too far away. But of course this is not only related to numbers or quantitative values, but there is the image factor of the weapon that greatly affects the players. Figures 5 to 10 show a comparison of the values given by game developers regarding the abilities of World War II weapons with more modern weapons.

**Figure 5.** Thompson WWII Firearms, Submachine Gun (SMG) Type, Time To Kill 0.171

**Figure 6.** PP-19 Bizon Modern Firearms, Submachine Gun (SMG) Type, Time To Kill 0.171

**Figure 7.** Kar98K WWII Firearms, Sniper Rifle Type, Time To Kill 0.001

**Figure 8.** AWM Modern Firearms, Sniper Rifle Type, Time To Kill 0.001
Figures 5 to 10 above are data obtained from zilliongamer [15]. From this data, it can be estimated that players should get the experience of defeating opponents with the same feeling or not too much difference between using firearms from World War II or even more modern weapons. The exception is the Light Machine Gun (LMG) which has a different kill time value and a longer reload time on the DP-28 type. The next question is related to what players do when they find more modern weapons while holding weapons from World War II?. The data shows that 60% of players immediately replace them with the latest weapons, 30% of players make weapons from World War II as a secondary weapon or backup weapon, 10% of players continue to use weapons from World War II that they feel are right for them. An overview of this data can be seen in Figure 11.

The average player decides what to do when they find a more modern firearm while holding a firearm from World War II is to replace it or make it a second weapon. Few players stick with firearms from World War II and don't replace them. This is on average because players do not see the quantitative value given by game developers regarding the ability of firearms. The decision to replace firearms was due to the perceived better image and feel that looked cooler so that they felt that modern firearms were definitely better than old model firearms and finally decided to replace them. The sense that one’s own condition is inadequate because it is inferior to someone else’s circumstances [16].

4. Conclusion
The conclusion drawn from the discussion above is that the UI and UX of firearms from World War II in the PUBG game are strongly influenced by the image of the firearms from outside the game itself, such as movies or the fame of the weapon from the media circulating and perceived by the public. previous player. Players only see firearms from an interface that looks good and modern, so the user interface (UI) of World War II firearms in the PUBG game has low appeal in its use. User Interface (UI) with wood nuanced firearm visualization commonly used in World War II firearms has a low
level of popularity for use. User Experience (UX) from using World War II firearms in the PUBG game even though it is not too much different from other modern firearms in the game, is still considered worse because of the strong assumption that modern firearms are better. From these things, it can be concluded that User Experience (UX) has a lower urgency than User Interface (UI).

References