# Study of User-Created Interfaces in Video Games

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#### **Abstract**

Allowing a user the power to design their own interface has direct implications for HCI and is an area that is largely untested. One such game that allows this is *World of Warcraft* (WoW). Due to its popularity, WoW has spawned a large UI community that has created countless interface tweaks and *modifications* (mods). These mods range from simple location changes, to entire reworks of the interface with new themes and functionality. The study conducted looked primarily at the effects that user created interfaces have had on the game and its community. The goal was to explore why users modify the interface, the benefits and drawbacks of user created interface content, and the motivations behind why the community donates its time.

# Keywords

user-created, modification, World of Warcraft, WoW, HCI, interface

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# **ACM Classification Keywords**

H.5.2 Information Interfaces and Presentation: User interfaces Evaluation/ methodology

#### Introduction

Up to this point, HCI and video games have had little interaction even though the have a great deal in common. HCI is an area of study that is continually growing in popularity and video games have been on a steady rise since the 80's. Whether a game is good or not is highly dependent on its interface since that game is entirely controlled through it. It seems that no books on interface design in games have appeared even though the players' interactions in games is so intense and that game interfaces and universes have developed so dramatically since the first primitive ASCII-character games [4]. Since HCI is focused on interfaces, it is only natural then that HCI researchers would also be interested in studying the latest trends in video games and their interfaces. One of the most recent and popular trends in gaming today is the ability to "mod" (short for modify) a game. Modding allows the user to create their own content for a game in whatever manner they wish by building on top of the existing game. This trend was started in the 90's with the release of ID software's Doom and has continued to this day. Providing engines or editors with games is becoming standard practice among many of the PC game developers. Allowing the user the ability to create content greatly extends the shelf life of a game and expands the amount of playable content for all users at very little cost to the developers. The latest trend is to not only allow the user to create custom maps, but to also allow them the power to create their own interface.

#### **General Problem**

"• the trend towards flexibility and personalization is a good one, helping to fulfill the dreams of every computer user: a personalized system that does things the way you want it to." [3]

People grow up being told that everyone is unique and special. It comes as no surprise then that everyone has a differ-

ent idea of what they are looking for in an interface. Allowing users to create their own interface is one step towards the ultimate goal of having a program customized to meet the exact needs of each person. This is the greatest benefit of user-designed content. Content created by users is like democracy; it is a user run community, whose content is created by the users, for the users.

This study was designed to try and gain some insight into how users were customizing their UI, the reasons behind why they were doing it, and how those changes impacted their experience. The desire was to then see if this type of information could be used to help applications in other areas apply some of the same technics and possibly gain some of the same benefits.

## Why Choose World of Warcraft?

Video games are a highly interactive activity where the user interface is crucial to the success and playability of the game. The interface and method of interaction is often the game itself. This makes video games the perfect candidate for the study of interface design.

When looking at user created content, one of the most important aspects is the community itself. Online games, by their very nature, encourage cooperation amongst their players, which builds a thriving community.

Thus, the game World of Warcraft was chosen this because it met those criteria as well as others. It has a huge number(11.5 million) of enthusiastic and dedicated players that are more than willing to help each other out as demonstrated by the thousands of interface mods and millions of forum comments. It has a diverse player base (age, gender, and background) that can provide a wide variety in the responses. Its also a known fact that its players are very dedicated (playing an average of 25 or more hours a week). World of Warcraft is also one of the few games that provides the user with

such a great deal of control over the game's user interface. This made World of Warcraft the obvious choice for the study.

### Why Do Users Modify the Interface?

From the study a trend between a user's experience and their desire for the interface became very obvious. Of the users that rated themselves as "beginners", when it came to World of Warcraft, they unanimously also answered that they would prefer if the interface had "less information than the current default". Likewise, over 80% of participants who answered that they would like to have more information than currently provided, also considered themselves to be "experts" at World of Warcraft. It became apparent that as a user started the game they felt like there was too much information being thrown at them all at once. However as their skill in the game increased, so did their desire for increased information.

These results led to the idea of how this could be applied to World of Warcraft's interface, and other interfaces in general. Since we are dealing with games and all its various facets, why not take a play straight out of gaming's handbook, like levelling up, and apply that to the interface as well. If we take a look at role playing games (RPG's), the character often starts out with only a small subset of their eventual abilities. Through this levelling up mechanic the user is slowly guided into their role and allowed to familiarize themselves with the basic gameplay before the more advanced tactics are introduced. This seems like a perfect mechanic to leverage in order to deal with a complicated user interface. What if an interface started off with little to nothing displayed and as the person progressed in the application, more abilities (aka functionality) would be unlocked. As these interface elements are unlocked a short description would accompany the element along with the opportunity for the user to place the UI element at any location on the screen.

# Unique Challenges Faced During the Study Due to Video Games

Video Games, and more specifically MMORPG games such as WoW, present as with a wonderful opportunity for study, but also present some unique challenges when undertaking such a study.

While modifications by users to the interface are highly encouraged, at the same time they are not officially supported by Blizzard either. "There is no official support for modifying the WoW interface. If you experience any issues with the interface after modifying it, you can disable any unofficial add-ons and changes in the AddOns menu at the character selection screen. Blizzard Technical Support cannot assist with setting up any kind of interface modification." [1] This means that users are left to their own devices or must rely on the community to help them if problems arise with the modded interface. From the developers point of view this is the way it has to be because there are too many modifications out there to officially support and troubleshoot them all. Only the standard interface that comes with the game can officially be supported. This is often a point of contention in the user community because often the tech support team will not address any problems in the game until the user first removes all custom interface add-ons. User created addons are often the scapegoat for any problems in the game regardless if it is justified or not.

"Unlike other software and many games, which are published in discrete versions, MMORPGs exist in a continuous state of revision, with developers constantly identifying bugs, modifying rules, and adding features. Among the potential updates are interface changes, which may include anything from modified icons to a complete restructuring of the game's menu system and visual appearance." [2]

When custom interfaces designed by the users are added into the mix, the games numerous changes can quickly become overwhelming. MMORPG's as a genre are an always moving target. The game is constantly being patched and expansions are released that can completely change how the game is being played. In the case of this survey, it was undertaken shortly before an major expansion was released. This expansion not only put new restrictions on what was possible to do within the interface, but also managed to merge a number of the most popular community UI modifications into the default interface. While it would be nice to run the survey forever and have people constantly filling it out and looking at the changes over time, this is not really a practical solution. At some point the survey needs to come to a close. All one can do at that point is monitor the community to get a sense of the changes and take that into consideration when looking at the data.

Another challenging aspect of dealing with a multiplayer game like WoW is the ever changing user base itself. As the game is constantly patched a class of characters will often go from being considered overpowered (and hence a large number of people playing that class), to being "nerfed" and becoming underpowered in the next patch (and driving people away from this class). When looking at the data for this survey there was a strong community backlash again the Hunter class which was looked down upon and considered to easy. At the same time the Druid class was largely seen as underpowered and hence useless in most situations. When looking at the data it is important to note the general community feelings around the time of the survey as these feelings could have an impact on how the participants have replied. For example, a participant who plays a Druid and ends up losing in most player versus player situations, then this experience may lead them to believe the game is harder to play and that the interface is what is

#### Conclusion

Video games can teach us a great deal about all manner of aspects of computer science if we are only willing to listen and are able to push past the stereotype that they are children's toys. Many of the most cutting edge and boundary-pushing ideas in the tech industry are going on right now in the video game sector and it would be a shame if it was ignored. Video games have a dedicated and enthusiastic audience that are also includes some of the most technically savvy users out there. They appeal to a broad range of ages, ethnicities, and both genders, which makes them the perfect candidates for further study.

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