

INTRODUCTION

In just over 10 years mobile gaming has gone from *Snake II* on a Nokia 3310 to a multi-billion dollar industry for mobile phones and tablets.

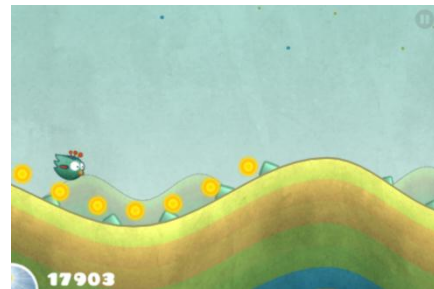
More people than ever are playing mobile games thanks to the rise of cultural phenomena like *Angry Birds* which, at over 20 million downloads, became the best-selling app of all time.

But what makes a handset or tablet-based game great? What problems can hinder the experience? Usability experts SimpleUsability look at the top ten features in mobile games.

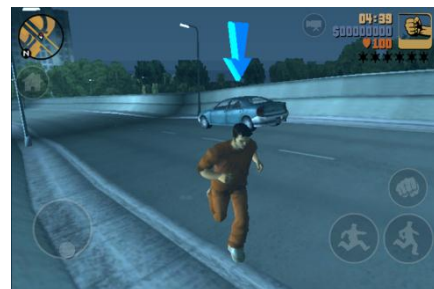
1) KEEP BUTTONS SIMPLE

The controls to a mobile game should be made as simple as possible. Even if the game demands a complex control scheme, a way of streamlining and simplifying the inputs should be considered.

Mobiles and tablets present fewer buttons and control options than ergonomic console controllers, meaning mobile game developers need to innovate. Those that have done it successfully have done so by amalgamating intuitive controls with simplicity. Popular games, such as *Tiny Wings*, require only a single input, pressing and holding the screen to speed up the descent and releasing when travelling uphill.



Despite its popularity and the brand loyalty garnered from console success, *Grand Theft Auto III* places numerous buttons on screen to perform wider functions, but this becomes a barrier to the game. Without the vibration and tactile feedback of a console or PC game, it can be difficult to tell if you are pressing on-screen buttons correctly. Movement and vision circles which replace a joystick to move a character are also problematic.



2) DEVELOP ON-SCREEN REAL ESTATE EFFECTIVELY

The amount of real estate on any screen is limited and must be considered.

Playing the game *Age of Zombies* for example requires using the two on-screen 'virtual joysticks' with your thumbs. This obscures so much of the screen that it makes the game difficult to play.



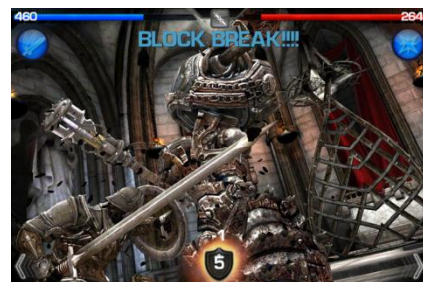
It is an issue too for tablets, even with their greater field of vision and higher graphic fidelity. Playing the same game on a tablet, the joysticks become hard to use with any degree of accuracy as they are more spaced out than on the mobile phone equivalent.

Another issue with having a larger screen to play the same games is that the Heads-Up Display (HUD) is relegated to the user's peripheral vision. The smaller screen of a mobile phone means it is always in the user's eye line, whereas with a tablet screen they will often have to break their focus on the action and look to the edges for important game information.

3) FEATURE FEEDBACK

Without the tactile feedback of a button press or vibration, mobile games must use a different way to communicate to users that their action has been registered; they should provide on-screen feedback that is unobtrusive but informative.

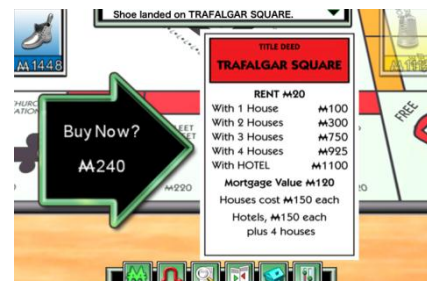
Infinity Blade, for example, highlights the on screen buttons when the user presses them and displays correlating text on the screen. These immediately inform as to whether attacks or blocks have been successful or not. Similarly, when inflicting or receiving damage, the number of points lost flashes on screen and registers with the health bars, which remove the respective amounts.



4) KEEP ICONS CLEAR

Icons are useful in representing 'shortcuts' to menu options without the need for supporting text.

To work however, they must be clear and unequivocally relate to the function: a dollar sign for money, a spanner for tools. When unfamiliar, abstract or ambiguous icons are used they can have the opposite affect with users failing to grasp what they represent.



5) HAVE INTELLIGENT INTERRUPTION SETTINGS

On a mobile handset, receiving a phone call will instantly exit a game so an intelligent approach to interruption settings in the game is essential.

If when restarted the game has not paused or automatically saved the user's state of play, a negative opinion of the game is formed. Users will be less inclined to play the game in future for fear that another phone call will disrupt their game and lose their progress.



As the majority of people play games on mobile devices while on the move and in short bursts, a clear pause button (*Angry Birds*) is always advisable so that users can be confident that they can quickly suspend and return to the game.

6) START SESSIONS QUICKLY

To facilitate the ‘pick up and play’ nature of mobile games and minimise waiting time, sessions must have a quick start option.

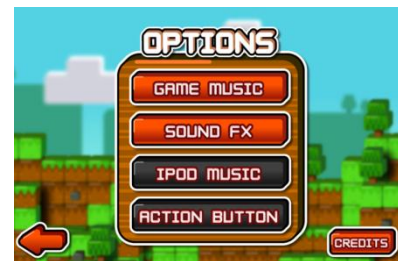
In *Jetpack Joyride* the start screen displays the command ‘Touch anywhere to play!’ beneath the game title. Upon tapping the screen the game title and command disappear and the game begins instantly.



7) MAKE SOUND SETTINGS INTUITIVE

Muting the volume on a mobile device or tablet should also silence the game to avoid the user having to manually mute each game they want to play without sound.

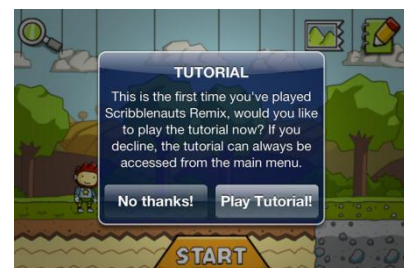
Mobile games are often played by users who simultaneously listen to music through their device at the same time. Many games do not recognise dual usage and will play in-game music and sound effects over the user’s personal music. This requires users to search for a manual way of muting the game volume, which can be frustrating.



8) MAKE TUTORIALS SIMPLE

Nothing is worse than starting a game and feeling like you do not know what to do.

Unlike PC and console games, which come with a manual explaining the controls and basic game play, mobile games lack a physical guide. Simple tutorials that demonstrate what each input does and how to play the game must feature at the start of the game.

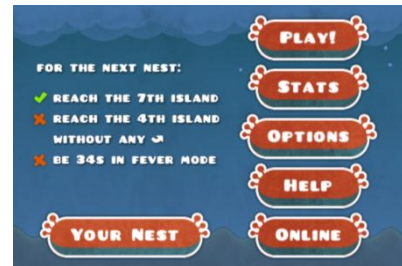


Tutorials should be easy-to-understand and stylish. This style should remain consistent and pop-up when new mechanics are introduced in later stages. The opening levels should also start simply and allow rapid progression to create ‘buy-in’ among users.

9) GIVE GOALS AND REWARDS

Games should provide clear and overriding objectives for players and visible goals to work towards in the game. In a bid to save space on screen, rolling scores can be removed, but the short feedback loop of visible progress provides a hook to the user.

Without a defined aim or objective, whether story driven or high score, users will lose interest in the game and move on. It is also important to keep users invested in a game by offering them rewards for meeting in-game goals. A new level or item not only rewards players for the actions they have just performed, but also incentivises them to continue playing the game with the promise of further unlockables.



10) PROVIDE ASYNCHRONOUS MULTIPLAYER OPTIONS

Providing asynchronous multiplayer options in a game engenders a healthy multiplayer community. Whereas traditional multiplayer games on consoles require all players to be present at the same time, turn-based mobile games like *Words with Friends* and *Hero Academy* allow players to make their move at any point after their turn begins.

Players also receive notification via a prompt on their handset, making mobile the ideal format for these more episodic games. Providing leader boards and in-game rankings is also a good way to challenge others without the need for concurrent presence in the game. Whether displaying high scores, as in *Doodle Jump*, or showing the ghost data of an opponent's lap time in *Sprint Racers GP*, successful multiplayer options no longer means that all players have to be connected at the same time.

