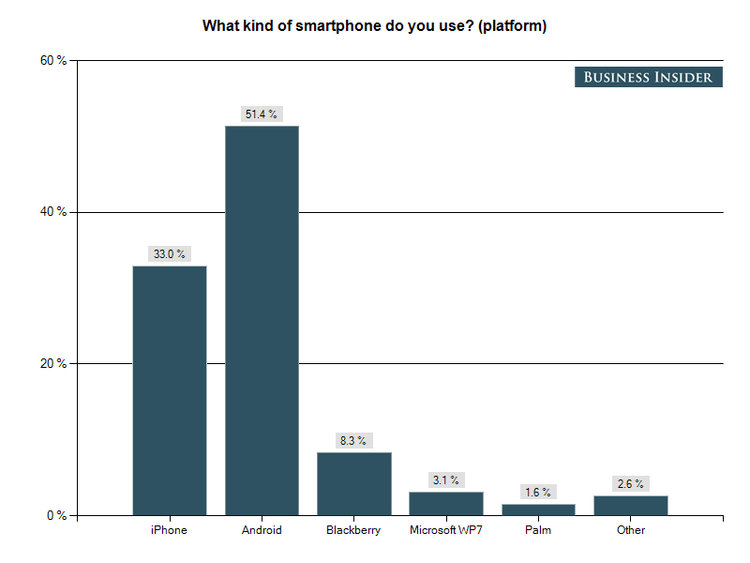
**Executive Summary (Bird Blast! – Squirrel Warfare) – KIERAN LINEGAR**

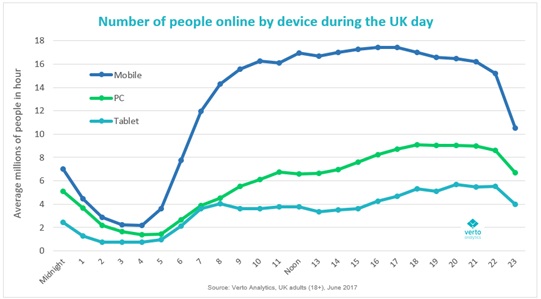
The game design that I have chosen to present is my first design: ‘Bird Blast – Squirrel Warfare’. It will be presented as a ‘Match-3 puzzle game’ similar to other titles such as ‘Bejeweled’, ‘Cookie Jam’ and ‘Candy Crush Saga’. What sets it apart from other titles like the ones mentioned prior is that this game will feature birds and squirrels as the main characters and will contain several game mechanics not seen before in a match-3 puzzle game.

The platforms that I have chosen for my game to be playable on are android smartphones. I have specifically chosen these platforms for two main reasons:

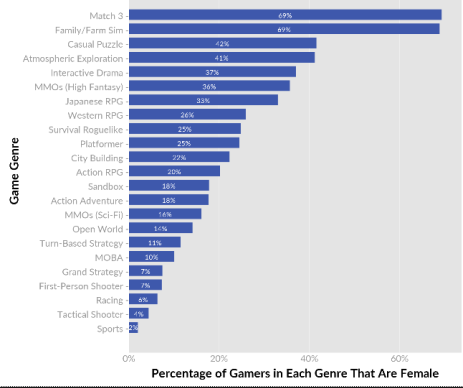
* Unlike iOS; many different manufacturers such as Samsung, LG, Huawei and Motorola just to name a few use Android. iOS on the other hand is only used by devices made by Apple. Being used by more phone manufacturers would mean that Android would be used by more people than iOS as not everyone will want to go for the same product. Choosing Android means that you would be appealing to a bigger target audience. This can be seen in **Figure 1.**

**Figure 1.**

* There are more people that use a smartphone than people who use a tablet. This would mean that choosing smartphones instead of tablets would be aiming for a bigger target audience and so the potential profit from this game could be higher. **Figure 2.**  Shows the number of people online by device during the day in the UK comparing Mobile, PC and Tablet.



**Figure 2.**

Looking at the information that I have found, the target audience for a Match-3 puzzle game are women. **Figure 3.** Shows that 69% of people who play Match-3 puzzle games are female. (This can be seen at the top of the image.) This information can show us that females are the larger target audience for a match-3 puzzle game and so it would be most logical to make a game that would appeal to them for the game to be the most successful and therefore make the most profit.

**Figure 3.**

Games such as Candy Crush and Bejeweled often appeal to this audience and so it would be better to design a game that is similar to these games. Besides the mechanics, these games look appealing to the human eye with bright colours and interesting styles, these games also have their own soundtrack playing in the background. It is a combination of these factors that have made these two games so successful and as stated before, it would be best to include these factors to make a successful game.

**What is the story of my game?**

One peaceful evening, a group of birds have prepared a feast full of delicious nuts and seeds. Just as they are about to tuck-in, the birds hear fake mating calls and rush to find their potential mates; these fake calls are part of a master plan formed by an evil squirrel named General Squeak. As the birds are distracted, the General and his minions steal all of the birds’ delicious seeds. Disappointed by the fact that there was no mates, the birds return to the feast only to be horrified by what they see: All the seeds are gone and all that is left is a few strands of squirrel fur. Enraged by the squirrel’s actions, the birds swear revenge and declare war against the squirrels. Feathers have been scattered throughout the land that the birds can use to defeat the squirrels. Each colour of a feather attributes to one specific bird (E.g. Light blue feathers attribute to Bungie.) and when matched with two or more identical feathers, the feathers will grant the birds the ability to attack and defeat the squirrels.

**Game Mechanics**

My game will feature multiple mechanics, some of which are similar to other match-3 puzzle games such as swiping your finger in any direction to move objects to match them with similar objects. Other mechanics my game should include are:

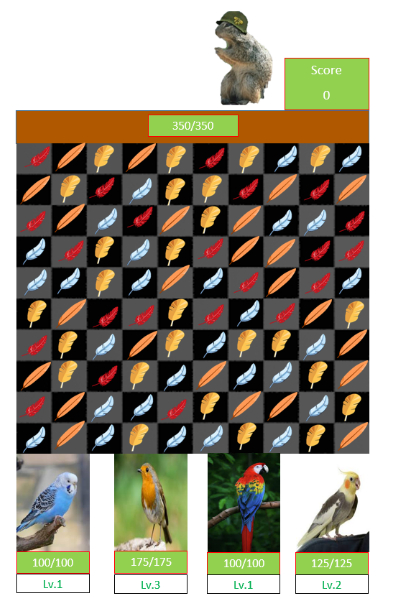
* In-game currency (seeds) that can be earned through gameplay or through paying real-life money.
* An energy counter that depletes as the player plays more levels. The energy can recharge after a certain amount of time or can be paid to recharge completely.
* In-game enemies that will cause damage to the birds and so giving the game more of a challenge.
* In-game challenges that can grant the player extra rewards such as bonus seeds or rare cosmetic items.
* Leaderboards that can compare the player’s score to friends connected to social media

Unlike other match-3 puzzle games however, my game will feature an in-game shop that changes items daily that can be purchased via in-game currency or through real-life money. These items can include cosmetics, power-ups/boosts etc. Another feature will be a garden that acts as the player’s base of operations where they can access the shop, choose levels, view stats and upgrade their birds. This garden can also be customised with items purchased from the shop or earned through challenges.

The controls will work by the player swiping their finger across the screen to drag a feather in the direction they want in order to match with two or more feathers of the same colour. (i.e. Swipe up = up, Swipe down = down, Swipe left = left and Swipe right = right.)The controls of my game will be identical to other games of the same genre. This is so players that have played match-3 puzzle games will feel already accustomed to the controls, as they are the same as featured in other games.

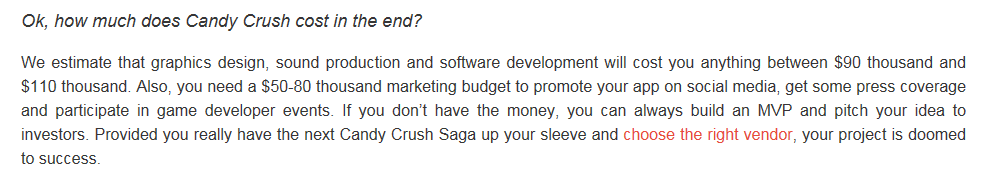
The goal of the game is for the player to defeat all the squirrels in the level by depleting their health until it reaches zero. This can be achieved by matching three or more feathers of the same colour. Upon completing a level, the player is rewarded with a number of seeds depending on the difficulty (i.e. easy = lower no. of seeds, hard = higher no. of seeds). Players can also earn rewards by completing various challenges such as defeating a certain number of squirrels. The player can be rewarded seeds for easier challenges and upon completing harder challenges; the player can earn better rewards such as cosmetic items.

The game’s User Interface must include menu options that the player can click so it redirects them to the linked feature such as the shop, garden or level map. While the UI needs to include all these features, it must place them in a logical manner such as across the top of the screen; not in random places where they can be a nuisance. These menu options should also be a certain size large enough so they can be read easily but not too big that they take up too much space on the screen.



**What is the game’s Budget?**

The cost to develop and advertise each game is different for multiple reasons such as number of employees and time to develop etc. but the average cost to develop a game similar to Candy Crush would be around $90-110K (£70-87K) and a further $50-80K (£39-63K) for advertising the game as shown in **Figure 4.** However as previously mentioned, all game’s budgets are different and they can fluctuate so it can be a good idea to raise the budget by at least a fraction more than expected just in case situations change during the game’s development cycle.

**Figure 4.**

**What are the skills needed to make my game?**

* Project Manager
  + Skills needed: Effective leadership skills, Strong communication skills, Time and Team management, Negotiation skills and risk assessment skills.
  + Salary: £40K - £60K (Annually)
* Designers
  + Skills needed: Creativity, Passion for games, Knowledge of gaming trends, Communication skills and Knowledge in programming languages such as C# and C++.
  + Salary: £19K - £55K (Annually)
* Programmers
  + Skills needed: Strong communication skills, Knowledge in programming languages, Time management and Knowledge with programming software such as Python.
  + Salary: £52K Average (Annually)

**Exploiting the target platform/device**

Exploiting the target platform or device means taking advantage of the device in some aspect. This could be the features of the device for example. In this case, exploiting Android over iOS would be more beneficial for the game. This is because as mentioned at the beginning of the summary, Android is used by many smartphone manufacturers whereas iOS is exclusive to Apple devices. This would mean that more people will use smartphones that use Android than iOS and so the game would be available to a larger target audience thus showing exploiting Android due to the larger audience would be more beneficial for the game’s success.

**What are the constraints of a 1GB download file size?**

There are many mobile games in the app store that are huge, many of which greatly exceed the OTA limit (Over-The-Air) of 200MB. This limit affects the maximum size that a game can be downloaded over a 3G/4G network. The limit was designed as a means of preventing IPhone users from downloading files too large that it would end up consuming the user’s data allowance or running up data charges. This would mean that fewer users would download a game that is larger than the OTA limit of 200MB so it would be more appropriate to keep the game file size below this limit.