**ITT Assignment 3 – Risks – Corbin Peever**

What risks can you identify for your project? There will always be some generic risks (such as computers breaking down the night before a deadline, health and family issues, and institutional changes). Do not include generic risks such as these. The idea is to be as specific as you can to your project. For example, if your topic is to develop a game, there may be a risk that the software you choose to work with may be very difficult to learn, poorly documented, or not turn out to have the features that it claims it has. These properties are often only discovered once you have started working with the software, and so unless you have had lots of experience with the particular tool, there is always a risk that it may not work as well as you believe it should, no matter how much prior research you do. Similar comments apply to hardware.

There have been many challenges that we at XVI have faced in the pursuit of producing a fully fledged web app. In the beginning we saw the monolithic effort of creating SocialCare Chat as something we could achieve in a mere few weeks, even as an early representation of itself, but we quickly realized that was wrong.

When we understood the size of the venture before us, we devoted our efforts to producing early version artefacts that would one day make up SocialCare. This presented its own set of challenges in trawling through the enormous library of information on web app development software and the many possible paths we could have taken with development, hosting, and platform compatibility.

Our main concerns were:

* **Finding the correct development suite:** There are innumerable options when it comes to making and app that is accessible from any device, anywhere. [Amazon](https://aws.amazon.com/), [Google](https://cloud.google.com/appengine/) and [Microsoft](https://azure.microsoft.com/en-us/) are the market leaders in hosting and development but there are countless other PaaS solutions like [Flutter](https://flutter.dev/), or platform contextual SDK’s like [Android’s](https://developer.android.com/) development suite.

Through research we ended up deciding on Eclipse, Java and JavaFX for development and Azure for hosting.

* **Our ability to use the software:** Only a few of us are learning to program, and of that few we are still beginners. This suggested that learning to write in the required frameworks for dynamic web app creation was something that we were all basically learning from scratch and would be highly unlikely to achieve in the time given.
* **The time we had:** With only a few weeks at best, the realistic possibility of writing, debugging and testing SocialCare before being able to successfully launch something we could vaguely call a reasonable web app was incredibly small. Our only hope was to produce smaller artefacts that would one day make up a whole, but even that would be a prospect in the short amount of time we had.
* **The need to invest our own money:** We arrived at the point that if we wanted to push on with creating SocialCare, we would need to invest our own money, as a subscription service, specifically in-regards-to hosting and user data access elasticity, likely on Azure. These costs could end up being massive, with no guarantee of return on investment.

These were very real concerns to us, and heavily influenced our choices with how we would move forward. Our target has been to be as realistic as possible and produce something in line with that scope. Weighing the risks has directly led us deciding to make a presentation of a future incarnation of SocialCare, while developing the body of the app alongside.

To only look at right now would be foolish and although short term problems have led to short term decisions, we have also discussed the future possible ramifications of app development. An app is something that grows relative to user interaction, and that is a largely unpredictable force that we would have to have accurate plans to combat.

In setting ourselves up for success we discussed the following future possibilities:

* **The competition:** There are many other key players in the world of peer-to-peer video chat on familiar platforms that many people already have downloaded. We saw that there is a need to distinguish ourselves from the others by creating an app that is niche and easily accessible for elderly people that also develops a medium to facilitate a connection between specific people.
* **Unforeseen costs:** Hosting, testing and development time are expensive and time consuming. As SocialCare grows larger than we can manage, we would also need to hire employees, introducing wages, superannuation, and additional management requirements.
* **Data breaches and malware:** Protecting our data and preventing access to unwanted third parties is a new concept for us. There is no easily accessible rule book to this and takes study and experience to master, especially in large scale web applications, something we are not yet accomplished in. It will be important for us to expand our understanding of cyber-security specifically to-do-with web apps.
* **Our choice to launch on the web:** The conventional way of accessing apps for the general user has been through a smartphone or tablet, on the OS-specific app store. There are many web applications, and it has been the major player in delivering apps to customers since the conception of the internet but is largely considered the exception today, despite claims that mobile app popularity is on the decline (Lance NG, 2018). Ultimately, we decided to go with a web app as we believe that in the long run it is more accessible for elderly people and is likely to grow in popularity as people realize the widespread benefits.
* **Continuous marketing:** The continuous stream of marketing required to build and maintain public interest in our app is too massive a cost to legitimize without previous interest. Unfortunately, it is the cost required to generate interest in SocialCare and therefore must be paid out beforehand. Through expansion this cost would increase and could potentially become massive, and necessary, before SocialCare has developed the coffers to afford it.

Above all else the most important issue to place our attention on is what exactly SocialCare is and how people would realistically use it. We aim to create and app that actively and directly facilitates the connection between two people, one younger and one older. Although we can have a lot of control over exactly who ends up being a user on our app, people are people, and anything can happen.

There are many issues directly related to SocialCare Chat:

* **Comfortability in conversation:** If the app does not flow and feel engaging for the users it will affect their conversations. People can be incredibly awkward, especially when first meeting each other so we believe it is important that SocialCare Chat has a good human-interface that involves “break-the-ice” features like questions or games. We are hoping that traditional games are a good way for both players to bond but for the young to also learn from the wise masters.
* **Technical ability:** The older generations are not necessarily known for their tech-savvy, but the younger is. To combat this, we have decided to involve two “sides” to SocialCare Chat. The elderly log in would be streamlined and involve bigger buttons and straight forward navigation. We would likely disable most settings, game set up and chat room functions to the older person and leave those to the younger person as it is considered common knowledge for them now.
* **Opinions:** Most of the targeted “younger” portion of our user’s hold very different values that the elderly did in their time. We now have huge differences of opinion, lifestyle, moral values, and visions of the world. Colloquially known as being “gapped”, this is a very real problem. It is important that SocialCare Chat helps users find conversational topics that they may see eye-to-eye on and “facilitates” conversations between the two people rather than just throwing a millennial and a boomer into a chat room and letting them go wild. We may need to permanently ban “okay Boomer”.
* **Poor health:** As people get older, their health declines. There will likely be periods when two people have developed a bond but unfortunately the elderly persons health afflictions increase, putting them in periods of long hospitalization or, in worst-case but highly likely scenarios, them passing. We would need to give the younger person the tools to deal with this and even possibly how to look for early signs of poor health and seek attention for them from a professional. We have even considered the possibility of the users eventually entering a “buddy” system wherein the younger person is alerted to critical health issues of the elderly person like falls or strokes.
* **Sexually suggestive behavior and harassment:** Let us be honest, this can go both ways. People are unpredictable and putting them on video chat together has traditionally led to a variety of things you would not discuss over dinner with the family. We made the choice to not allow lewd or suggestive content, but people are people and it is surely inevitable. It will be necessary to develop passive functions to catch “bad” content, a good public relations process for “reported” content and strong methods to remove, suspend and ban users if they break the rules.

Confident in that we have assessed the most likely risks involved with making SocialCare Chat, we believe that we have the information required to make the right choices moving forward and have given ourselves the best shot at making something we once considered impossible. The nature of anything customer facing and associated with business is that the challenges it faces will constantly evolve and must be reassessed relentlessly. We are prepared to do this and have a plan-of-action on how we will likely face most expected problems as they arise.

**References:**

* Lance NG 2018, *The End Is Near For Mobile Apps*, Medium Technology, viewed August 15th, 2020, <<https://medium.com/s/story/mobile-apps-will-disappear-soon-4b4e54f46eb8>>