Research Results

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| **Team member** | William, Charlotte | **Date completed** | 11/06/15 |
| **Research area** | Text-to-Speech streaming technology | | |
| **Problem Identification** | Currently MBROLA and Festival are used to create .mp3 files in UpStage when a user uses the chat box. Flowplayer Flash is used to stream those .mp3 files in order for users to hear the speech. However the removal of Flash dependencies is required in order to use UpStage on a mobile platform, so an alternative that can stream .mp3 files is needed to replace Flowplayer Flash. | | |
| **Suggested solution** | While researching Flowplayer Flash I discovered that Flowplayer now has an HTML5 version available, which has almost all the same functionalities and work similar to the Flash version already implemented in UpStage. | | |
| **Development/Prototype** | * The prototype needing to be developed would need to be able to stream .mp3 files by taking the file name as a String. * The prototype would need to achieve streaming the files without using Flash. * Can take different .mp3 files | | |
| **Evaluation** | * The Prototype is able to take the name of an .mp3 file as a String and stream it to the user. * The Flowplayer HTML5 version does not use Flash. * The prototype takes different .mp3 files. * After further research of Flowplayer HTML5, it has been determined that there is no official example of Flowplayer solely for audio. So this prototype still uses a video form in order to achieve the audio capability. | | |
| **Conclusion** | This prototype is a good example of streaming .mp3 files. It could certainly be used to replace the existing Flash version. However there is a small latency in playing the audio, I am unsure if it is the files used to test the prototype since they are quite large. It may be better to use MBROLA and Festival voices in order to determine if the smaller files reduce the latency or if it is simply the hardware in which the prototype was being tested. | | |