

JUMPSTART

CAOS206 Major Design Project Process & Reflective Report

by Kate Scott



APP DEFINITION STATEMENT

This task involved working with another student, Amber, to further develop an immersive physical educational application called JumpStart.

It aims to use an iPad device as a medium which enables children to develop physical education and cognitive tasks. By collaborating with designers and educational professionals, JumpStart provides a platform suitable for further development and refinement.

It targets children aged 3-5 years old and aims to assist them in the early development of basic physical skills.

Concept Statement

JumpStart is an immersive educational application designed to develop basic cognitive tasks that are user friendly and visually appealing for the target audience of children aged 3-5 years old.

This statement was developed from Apple's HIG (2010) and began by defining features a user requires including: a visually appealing graphic style, character development, a sense of adventure via narrative, backgrounds and themes, and a reward system.



RESEARCH

For weekly post on this head to:

<https://kateescott.wordpress.com/2017/04/20/week-6-2/>

Immersive Learning Theoretical Reference

In her book 'Immersive Learning' Pagano addresses the importance of design in differentiating a users experience, she states that "it is not technology itself that creates experience," but rather technology that creates opportunities; in which design activates them" (Pagano 2013, p.3).

She reflects on the importance of user experience in an immersive application in order for a user not to become bored or frustrated, but rather create curiosity, appeal and/or emotional connection.

Pagano puts the concept of immersive learning into one simple question: "How would you teach someone something really important if you had no barriers?" (Pagano 2013, p.14)

In order to effectively communicate the design principle, a developer/designer must have identified goals, a mechanism for a user to practice the skills needed to achieve these goals, and a measurement system showing learners how close they are to achieving each goal (Pagano 2013, p.17).

Pagano then summaries by reflecting on how "immersive learning is not about the technology, it is about the design principles that allow learners to practice in context, apply their knowledge, and improve their skills and competence" (Pagano 2013, p.19).

These elements are extremely important when developing the application for the target market. It is important to focus on the design and user experience over the tools that will be used to demonstrate this.



Tapworthy

Theoretical Reference

In his book 'Tapworthy: Designing Great iPhone Apps', Clark discusses the importance of setting apart your application. He states that "great app design has to embrace a carefully honed concept, a restrained feature set, efficient usability, and a healthy dollop of personality" (Clark 2010, pp. 1-2). Clark talks precisely about tapworthy design starting with a "firm understanding of the audience and their goals" (2010, p.17) and the means of designing for economy of time, attention and screen space.

These are important concepts to consider when developing JumpStart to ensure the user is placed in a position where they understand the content show. This will influence the prototyping stage of the design process as different ideas will need to be tested to ensure it meets the needs and functionality the user requires.



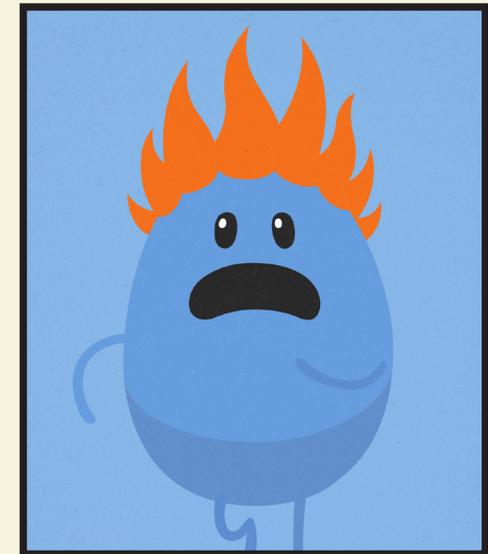
Dumb Ways To Die Design Reference

Dumb Ways To Die is a campaign which aims to keep Melbourne residents safe around trains. It's success is based off "adorable, amorphous characters with a catchy tune" (Diaz 2013).

The promotional strategy worked due to the universal appeal with "grizzly bears, piranha, rattlesnakes", with the blob people having no race or sex attached to them (Diaz 2013).

The characters were used to tell the story with "bold posters and ambient displays that were fodder for Instagram and social media"

(Diaz 2013). With the characters now being globally recognised, it is clear that the character attributes have contributed to the overall success of the campaign. By appearing to be really happy, the characters attitude dramatically changes when something happens to them. This puts the audience in a position where they think it is fun, unaware of just how dangerous this can be, and as Pluigers and Ilona state "the characters look so simple, but there is a lot of detail going on making it visually interesting to look at" (2013, p.9).



Stuart Holmes Design Reference

Informing the design development of this project is the work of Stuart Holmes. Holmes style has evolved and demonstrated a contemporary, flat graphic look, “with some textures used within the flat colours to give the work some depth” (Illustratoren 2017).

With influence from Saul Bass, Patrick Caulfield and Erik Nitsche, he has grown to appreciate and respect the power of bold colour and the significance of white space (Stuart Holmes 2017).

Stuart also aims to add charm, humour and warmth to his illustrations wherever he can, in tune with the brief (Illustratoren 2017).

Holmes will influence the design approach for my immersive application design in order to visually and effectively communicate the purpose to the intended target audience, with emphasis placed on the child-friendly flat vector style that integrates bright and bold colours.



PROCESS

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Define

JumpStart is an immersive application which aims to educate and develop the cognitive skills of children aged 3-5 years old. Amber and I were tasked with developing the visual style inclusive of suitable characters and background illustrations in order to bring all aspects of the application together. Our brief was to create 12 characters for 12 levels, which consist of 3 activities in each. This would then need to be paid with a background in order for the target user to easily navigate the application.

Research

Amber and I undertook extensive research in order to determine what made JumpStart different from other pre-existing children's educational applications. This research included looking at existing applications, children's TV shows, and graphic styles, in order to demonstrate the intentions and vision we had for the project.

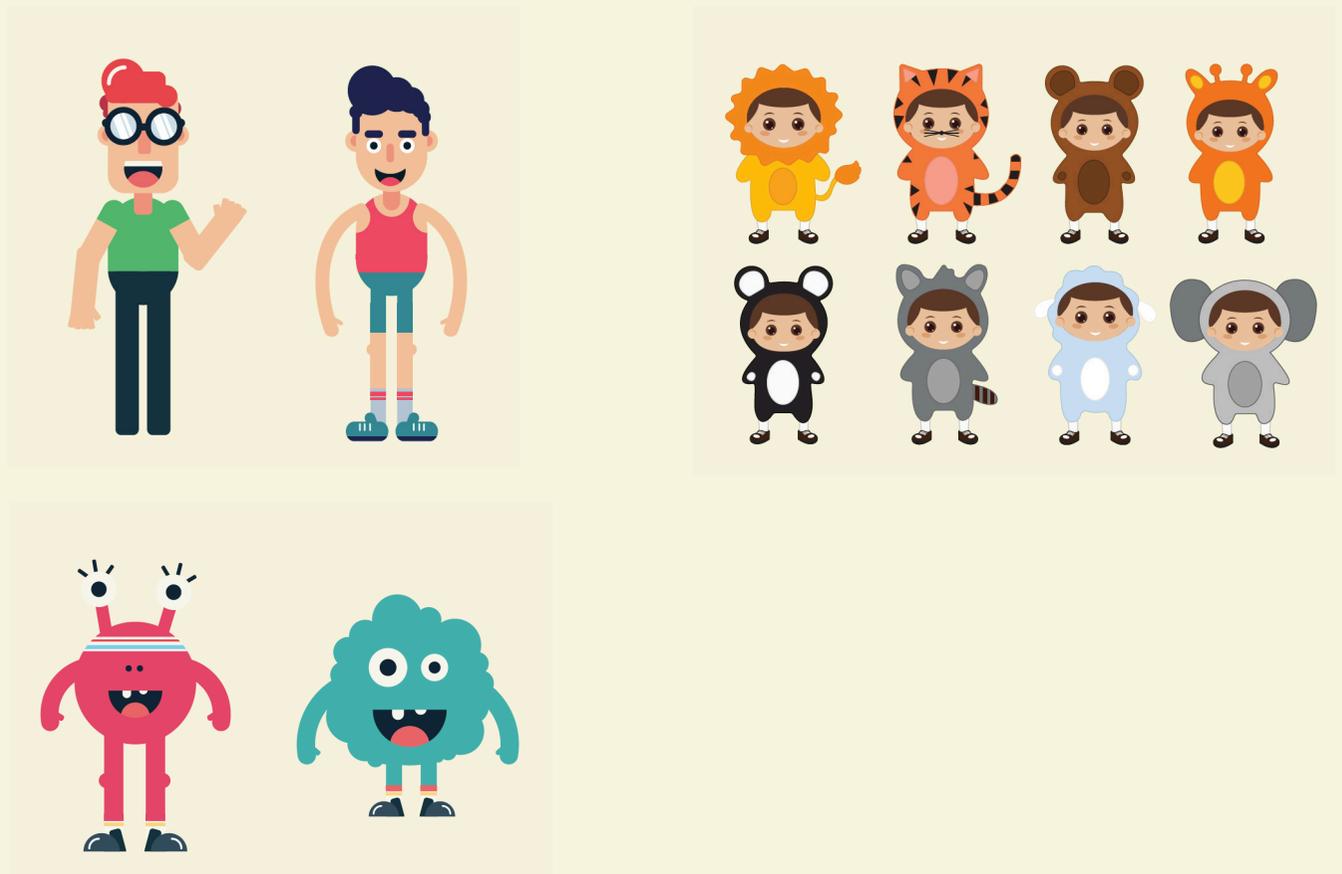
The research showed that many applications had simple illustrations with elements such as rewards systems and character customisation. By researching the values of the target audience through conversation it also became clear what our focus needed to consist of.



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<https://kateescott.wordpress.com/2017/04/27/character-set-development/>

Ideate

The initial ideas demonstrated by Amber and I had the central concept of children-friendly characters. We wanted to create characters that could be implemented across each activity, and that would not in a sense appear scary or frightening to children. Here I developed 1 character set of animal onesies, and Amber developed 2, monsters and human characters.



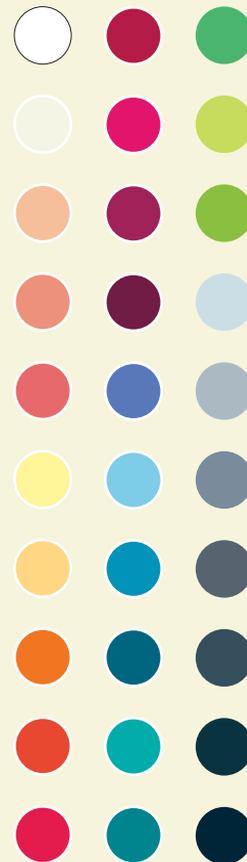
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<https://kateescott.wordpress.com/2017/05/24/typography-colour-palette-ia/>

Select

Alongside the character designs were those of typography and colour. After multiple testing of different elements of both type and colour, we decided to use the 'gigantic' colour palette as it displayed themes of happiness, excitement, fun and playfulness.

Rabbit Over The Moon was the typeface chosen as it was one of the only tested to have both upper and lowercase characters, we believe this font would be applicable to the iOS interface whilst still remaining appealing to children.



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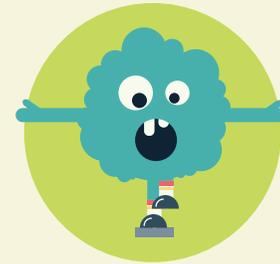
Ideate/Select/Prototype

At this stage of the project the all 3 character sets were tested. More variations of the characters were added to each sets as well as adding human qualities (e.g. arms, legs etc) to determine then features of each character set that were successful and other elements that needed more work. Here we were able to determine which character set would be taken to the implement stage of the project.



Ideate/Select/Prototype Continued

The illustrations on the right show elements of testing that involved analyzing each character set to determine its strengths before further developing and refining for the next stage of the project.



For weekly post on this and examples of customisation head to:
<https://kateescott.wordpress.com/2017/05/15/character-customisation/>

Prototype/Select

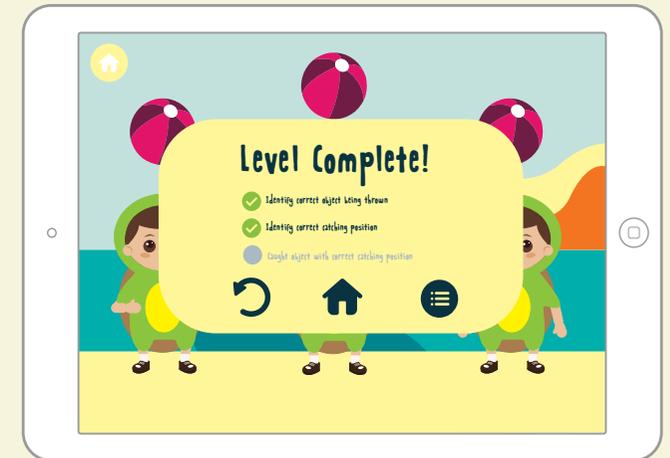
The chosen onesie characters was refined and further developed as we worked to create a character suitable for particular movements. It reflects the relationship between the user and how the characters would function in the iOS application, addressing the issue of movement and customisation.



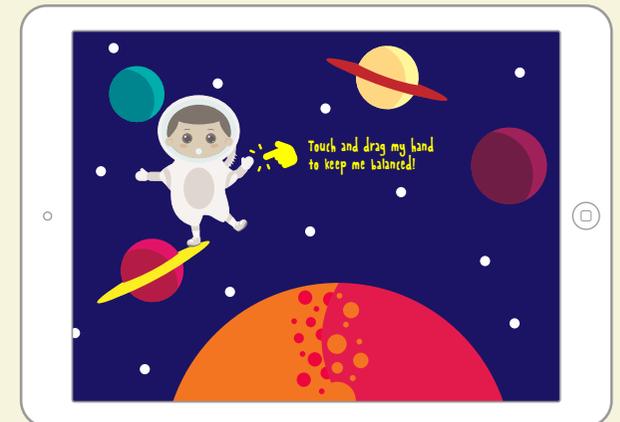
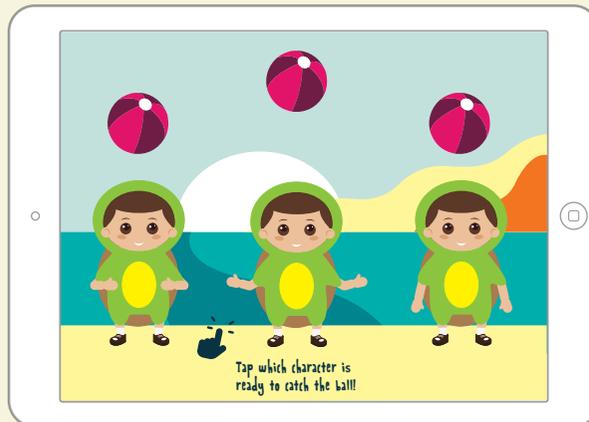
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<https://kateescott.wordpress.com/2017/05/27/level-navigation/>

Implement

The final decision of the animal onesie was rolled out across some backgrounds that were developed in the process. This includes the main navigation page.



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<https://kateescott.wordpress.com/2017/05/20/levels/>
& <https://kateescott.wordpress.com/2017/05/28/level-examples/>



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<https://kateescott.wordpress.com/2017/06/01/submission/>

Learn

Learning occurred throughout the design process. The select process gave Amber and I an idea of what elements gained positive feedback from the client, while the feedback from the class after the implementation stage of the project indicated which aspects would be well received by our target market, and which would not.



SIGNIFICANT OUTCOMES

Successful Outcomes

Design Process Application

In undertaking this project I followed the 7 stage design process by Ambrose & Harris (2010). By applying this, it helped to further develop and test our concepts, resulting in a practical and applicable design solution to the given brief. It allowed me to ensure I did not miss any critical stages of the design process, and allowed us to work efficiently. I feel as though by doing this we have successfully communicated our concepts and ideas, to enhance the overall theoretical and visual elements of the project. I intend to apply this to all future design projects as a scaffold.

Flat Vector Illustrations

As Bram (2013) states “a digital user interface can be beautifully shaded with gradients and rounded corners, there’s something a little more honest about flat design.”

I think by restricting our designs to flat-vector illustrations we have created a simple style suitable for a user interface for children aged 3-5 years old as it contains no 3D representations.

It places emphasis on the bold, bright colours and provides the user with less distractions so

they can focus on the character and activity they are undertaking.



Unsuccessful Outcomes

Communication

Within the duration of this project, I think our overall result was restricted due to the lack of communication/miscommunication that occurred.

I think that if we were giving the task in writing stating what we had to produce for our class assignment in alignment to what we were working on for the client we would've been able to focus more on the elements we were getting assessed on such as UI and navigation.

Limbs & Movement

I think another aspect of this project that was unsuccessful at early stages was the development of human-like features to enable the movement of body parts such as arms and legs that the characters needed to carry out specific activities. I think this will be tested more as the application develops further with more alteration potentially required to meet the needs of the animations for particular levels and movements.



WHAT I HAVE LEARNT

Difference between immersive and productivity applications

The Apple HIG (2010) defines productivity applications as those which manage and organise complex data. In contrast it defines an immersive application as one which uses custom views and controls to take over an entire screen to provide a rich, interactive user experience.

In the transition from the first assessment to the second for CAOS206 I have undertaken the design of elements and features that contribute to both immersive and productivity applications.

The main comparison that I have made in this process is that immersive apps focus solely on content, and through this project we have demonstrated this through character development. It works to create a unique experience without standard controls or reliance on the Apple HIG.

These apps are designed to create a unique experience without standard controls or reliance on the iOS Human Interface Guidelines, rather than productivity apps which focus on hierarchical structure, navigation, tool bars and text entry capabilities.

I think in the development of future projects knowing the differences and what constructs each application will be beneficial to ensure all elements meet the requirements/structure of the Apple HIG.



Communicative Illustration

This project has enabled me to explore the use of illustration as a tool for communication, and this was particularly relevant as the target audience is at an age where they are only just learning to read, and therefore are more interactive with visual elements.

As Evans & Thomas (2004) state illustration helps “an audience visualize something that can’t be seen or better understand something that’s complex” and through the use of an immersive application users are able to interact with this process.

I think the application of illustration will be something I strive to achieve for many future projects as it can have a large impact on users whether for digital or print design, and the actions that they partake in.

This project has shown me the impact illustration can have in communicating a message and engaging with a target audience. Exploring how characters portray movement with flat-vector illustrations was also challenging, and rewarding, a huge learning component for me that I believe this could be beneficial if I was to attempt animation for future projects.



Communication

This project has taught me the importance of meeting up with a client, whilst also communicating virtually and in writing. As miscommunication have occurred, I believe that in future more interaction, meeting up and communicating virtually could be beneficial in ensuring the final project is cohesive and that all criteria required is met.

Although, this can happen regardless it is important to minimise the risk of any miscommunication by establishing goals and requirements for the projects, ensuring all participants/designers/educators etc. are all working towards the same result in a specified timeframe.



CAREER RELEVANCE

In the environment of a design studio, the range of clients and design problems can be vast and challenging. By exploring different types of applications and how illustration and elements of Apple's HIG (2010) can contribute to the overall success of an iOS application I hope to demonstrate my knowledge of interface design and illustration, and their application across a variety of screen sizes and communication materials. In doing this, I hope to also demonstrate my extensive level of thinking whilst taking into consideration the integration of consumer needs/requirements.

I hope to work with illustration in the near future, and I believe that having the knowledge of how to apply this to a digital device will be extremely useful within the design industry.



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