There has been difficulty finding appropriate background research with regards to my project as understood by my supervisor since I am making a game which doesn’t really require external articles and other sources however I have endeavoured to link articles which have provided me with useful advice and information to consider when designing and implementing my game which will be expanded on below.

[1] I chose this source to be included as part of my background research due to the fact that this project is the first time that I will be creating a game and the article discusses game creation in java which how I intend to create the game, so in essence I will be a beginner. However, I am aided by my knowledge of java and the skills I have developed since studying programming and computer science as a whole. The source discusses the knowledge that will be useful to know before starting the creation of the game such as using exceptions, I/O streams, framework and OOP [1] which I had some practice with last year as part of my application programming module. Further into the article it also discusses the importance of using GIT as a project management tool to track and update my code especially if I’m working on different workstations so this source material is as relevant to my project as can be.

[2] I found the article exceptionally helpful as it details the very start to finish process of game design and creation. Reading this has allowed me to consider aspects of my game early on which will help increase its quality of play such as the audience that the game will be targeted at as well as the storyline and even aspects I hadn’t fully considered such as its potential for monetization (which could be through pop-up ads) [2] which is arguably the most important factor when creating a game! Reading the article has allowed me to realize the scope of my game and other areas such as ‘developing early visuals and sketches’ [2] of my game in order to get the look and feel of it. Since reading this article I have raised this as a ticket within JIRA as ‘create prelim sketches’ so I can have something to refer back to.

I have also come to the understanding that game creation isn’t just about implementing but thorough planning and documentation which includes designing “GDD’s” [2]which stands for game design document which essentially maps out the vision for the project including the story and game characters, rules and mechanics however this document is fluid throughout the project and is tweaked as the game is adjusted. Similarly managing the project in JIRA also embodies a similar principle of GDD’s so it’s likely that I will stick to using that system to realise my project as it progresses. The source also continues to discuss further stages of development however some areas aren’t quite applicable as the article discusses the stages of development for teams of creators rather than creation from an individual person.

[3] This particular article was helpful due to the fact that when it comes using animation within the game for the characters the movements to appear fluid and smooth. This source explores a few ways that animations can be created within the game using java. One of them being utilising gif images and putting it on to a sprite sheet in order to simulate fluid movement, I found this useful as when implementing walking animation within my project this could be a useful tool, the example they used was moving a starfish [3] to simulate a fluid motion but more interestingly the article continues to talk about other methods of animating. Reading about the use of coordinates in java graphics and the draw image method has helped me getter a better idea of how to implement my designs as its allowed me to look in to animating images using frame by frame transitions and then ideally looping through them while using a timer to give it a smoother look.

References

[1] Codegym. (16 Oct. 2019). Java Game Programming For Beginners: Where to Start[Online]. Available: <https://codegym.cc/groups/posts/182-java-game-programming-for-beginners-where-to-start>

[2] Nadia Stefyn. (23 Oct. 2019). How Video Games Are Made: The Game Development Process [Online]. Available: <https://www.cgspectrum.com/blog/game-development-process>

[3] Richard G Baldwin. (27 Sept. 2001). Java Game Programming For Beginners: Where to Start[Online]. Available: <https://www.developer.com/java/other/article.php/893471/Fun-with-Java-Sprite-Animation-Part-1.htm>