IDAT202 E-Learning Assignment Proposal
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Looking at the brief we've been set, our interpretation of this assignment will be focused on creating a game that focuses on using current methods of human learning in a vibrant unique way that will draw the user's attention and make learning enjoyable. The area that we are going to focus on for our project is science. We've chosen science because it's one of the core national curriculum subjects and is a something that children can get visual stimulation from as opposed to a subject like English. Science is popular and exciting for key stages 2 – 3. This period in a Childs life represents the transition from primary to secondary school therefore we hope our game will be able to provide a fun way to prepare new key stage 3 children for advanced science.

Our game will focus on replicating some of the popular scientific classroom experiments without the need for actual equipment or resources. This way we will be able to reward users or completing parts of the experiment correctly or show them a message informing them that they haven't got it quite right yet. This type of learning inherits methods that can be seen in behaviourism. Particularly that of operant conditioning, as the child is being presented with a task that needs completing therefore reinforcing the stimulus and increasing their knowledge. This method will allow the child to visualise the correct response, execute the procedure, and receive feedback on if they get it correct or not. These are the design methods for behaviourist learning. We've chosen a behaviourist method of learning because it allows learning via positive reinforcement. This enables us to play to the strengths of our designed flash game because the child will be completing the puzzle games and in line with the narrative of our game they will be given encouragement like "you win", "well done", "that is the best yet" etc. This will encourage children further along with the narrative itself.

Another Learning theory that we will look into via the tutorials and possibly demonstration animations will be that of Bandura's social learning theory. This theory is based on the ability for us to learn not just from experience, but from observation of others experience. An example of this is a child using a balance beam in a playground, an observer never having done this could learn the method of how fast or slow is necessary to get across successfully by watching someone else falling of it and eventually succeeding. This type of learning is purely based on the experience of others and our ability to understand this and utilise it with out the negative aspects of falling off constantly, this method complements the skinner style of repetition and reinforcement by allowing tutorials and demonstrations to help the child gain an understanding before the more behaviourist style of learning and positive reinforcement of the games. We have decided not to use the negative reinforcement methods, and instead focus on positive ones so the child doesn't become disheartened, the lack of the positive reinforcement should be enough. The ultimate learning objective will be to get the child to become more proficient at science and prepare them for key stage 3 science.

The program structure is based on a narrative of the person exploring a number of rooms. Each room will have a door to go to the next room, this door will be locked and the person will have to answer questions to get the door open. Each room will be themed like a laboratory for the task type and will have links to press for the user to be presented with information on the particular science area of the task. A task could be to put body organs in the right part of the body, in the room, posters and diagrams will appear, that can be zoomed in on and looked at to help with how they can complete the task. The game will have a narrative, for example something has got in to the lab, and you have to outrun it by going room to room till you get to the exit. This will give the user a purpose and desire to get out; also to help motivation and to keep the story line possibly we could use notes and plot happenings during the game to keep the users entertained. The style will be nice, bright and utilise flash animation to have a cartoon effect. It will be delivered as either an online flash game or CD-ROM game, the main consideration is that it has to be useable at home and not in a school environment.