* We decided to teach the Kanban Agile methodology as it is a staple in Agile Project Management and students will be utilising it in future software development projects at Victoria University of Wellington.
* PO required a multiplayer game that requires collaboration in order to progress/succeed, so the Kanban methodology is an appropriate concept to achieve this as Kanban promotes collaboration and clear communication among team members.
* Important aspects of Kanban that we needed to cover:
  + Visualize Workflow: Use a Kanban board to represent the flow of tasks.
  + Limit Work in Progress (WIP): Set limits on the number of tasks in each stage to prevent bottlenecks.
  + Manage Flow: Monitor and optimize the movement of tasks through the workflow.
  + Make Process Policies Explicit: Clearly define rules and processes for how work is handled.
  + Implement Feedback Loops: Regularly review and improve processes through feedback.
  + Improve Collaboratively: Continuously enhance the workflow through team collaboration and data analysis.
* Kanban games researched
  + Pass the pennies:
    - Explain the game very briefly
    - Pros: teaches limiting WIP and Manage Flow
    - Cons: Does not help students visualise the kanban workflow, very simple
  + The Number Multitasking Game:
    - Explain the game very briefly
    - Pros: teaches why limiting WIP is important and is more realistic than Pass the Pennies
    - Cons: Single Player
  + The Dot Game:
    - Explain the game very briefly
    - Pros: Requires different roles with different responsibilities, teaches all kanban elements
    - Cons: Does not explicitly show the a kanban board, but could be implemented easily into the process of the game.
  + The Bottleneck Game:
    - Explain the game very briefly
    - Pros: Similar pros to the Dot Game
    - Cons: Requires multiple teams of people, which is outside the scope of our PO requirements
  + getKanban:
    - Explain the game very briefly
    - Pros: Random events occurring (in the form of event cards) that make the game more realistic. Covers all the important aspects of kanban
    - Cons: Complexity is too high for one lab session
  + The Kanban Pizza Game:
    - Explain the game very briefly
    - Pros: Point based system which is perfect for a game implementation. Covers all the important aspects of kanban
    - Cons: Very “hands-on” game, and collaborative aspects are due to the in-person nature of the game. So, it will be difficult to translate these strengths into a multiplayer game.
* Favourite kanban game ideas:
  + The Dot Game
    - Instead of having multiple sessions of the game to teach players the principles of kanban, use a score to teach it. higher score the better the process
  + getKanban
    - the random events
  + The Kanban Pizza Game
    - point system
* Main reason for not directly implementing The Dot Game/Kanban Pizza Game into a video game is that the PO stated that video games are fun and unique as they cannot be replicated in real life, so only inspiration will be taken from these games.
* Video games that we used as inspiration and why
  + Researched into popular collaborative party games, to see if any style inspired us
  + what made popular collaborative party games “fun” and “team-orientated”
  + Overcooked!
    - Teamwork and communication are crucial as players work together to complete cooking orders in a chaotic kitchen environment. The game requires players to quickly adapt to changing situations and improve processes iteratively.
    - The physics and collisions between players and items create a sense of stress, which could be used to simulate the real-life complexities of handling multiple jobs at once.
    - The varying points awarded to a task with multiple affecting factors is a useful idea. This could be used to simulate the different success rates of tasks depending on the timeliness of completion and quality of the final product.
  + Keep Talking and Nobody Explodes
    - One player disarms a bomb with the help of others who have the bomb defusal manual. Effective communication and teamwork are essential, mirroring Agile's focus on collaboration and clear communication.
    - The idea that one player alone cannot complete the task is a very important characteristic we should use in our game design, as the PO requested collaboration be the driving force of the game.
  + Moving Out
    - Players work together to move furniture out of houses and into trucks. The game encourages adaptive planning and teamwork, as players must communicate and coordinate to overcome obstacles.
    - The feature in which players interact with furniture is a great example of how we could get players interacting with Tasks.

## References

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