Project Proposal

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Title: Canvas Kanban Board

Abstract:
One issue that is faced by many students is accidentally forgetting to submit their assignments. Most professors are not very accommodating for mistakes like not checking the canvas site resulting in a zero on the assignment in question. We hope to fix this problem by creating a canvas kanban board. Kanban boards are great for organizing assignments and information which we believe is a great pick for the issue at hand.

Introduction:
The Canvas Kanban Board will house all assignments and their due date in one place and prioritize them based on their due date. Allowing for swift access to all their assignments, students would never forget an assignment again! We hope for a very large reduction in both student procrastination and forgetfulness of students. From an article written by Exin, they state that by implementing kanban boards companies see that “Kanban can create a cost reduction of 69%” This is a lucrative cost reduction that comes about by saving time so imagine how much time it would save students.

Related Work:
We will research how to interact with the canvas API and how to use API keys to access the necessary information. We will also look into the philosophy behind Kanban boards so our project utilizes the most optimal form. Kanban boards were originally utilized by Toyota in the 1950s. It emphasizes visualizing workflow and limiting-work-progress. A kanban board is specifically effective because it helps reduce the number of work items in queues as well as the amount of idle time that people have by providing clear goals and objectives for them to work towards. The kanban board organizes activities into four sections: backlog, doing, idle, and done.(Damij)

Software engineering process: Scrum
For our project we are going to use a scrum process. The scrum process is composed of multiple individual sprints that change on a potentially daily basis. Each day starts off with a team meeting in which everyone discusses what they worked on the previous day, how much progress they made, and what progress they still have to make. The target of each sprint is decided based on the product backlog, eventually aiming to complete the product goal. We believe that this is the optimal strategy for us as it will allow us to move quickly and efficiently throughout the project. We will focus on one main aspect at a time, and have regular meetings

to update each other on our individual process. It will help keep every member motivated and on track with their work.

References:

EXIN. (2023, March 14). What is Kanban - and how it can help get more done, in less time. https://www.exin.com/article/what-is-kanban-and-how-it-can-help-get-more-done-in-less-time/#:~:text=Increased%20Efficiency%2C%20Collaboration%2C%20and%20Communication,to%20a%20more%20efficient%20workforce.

N. Damij and T. Damij, "An Approach to Optimizing Kanban Board Workflow and Shortening the Project Management Plan," in IEEE Transactions on Engineering Management, doi: 10.1109/TEM.2021.3120984.
keywords: {Task analysis;Software;Project management;Visualization;Standards;Feedback loop;Continuous improvement;Agile project management;Kanban method;replenishment;resource capacity;work-in-progress (WIP) limits},

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