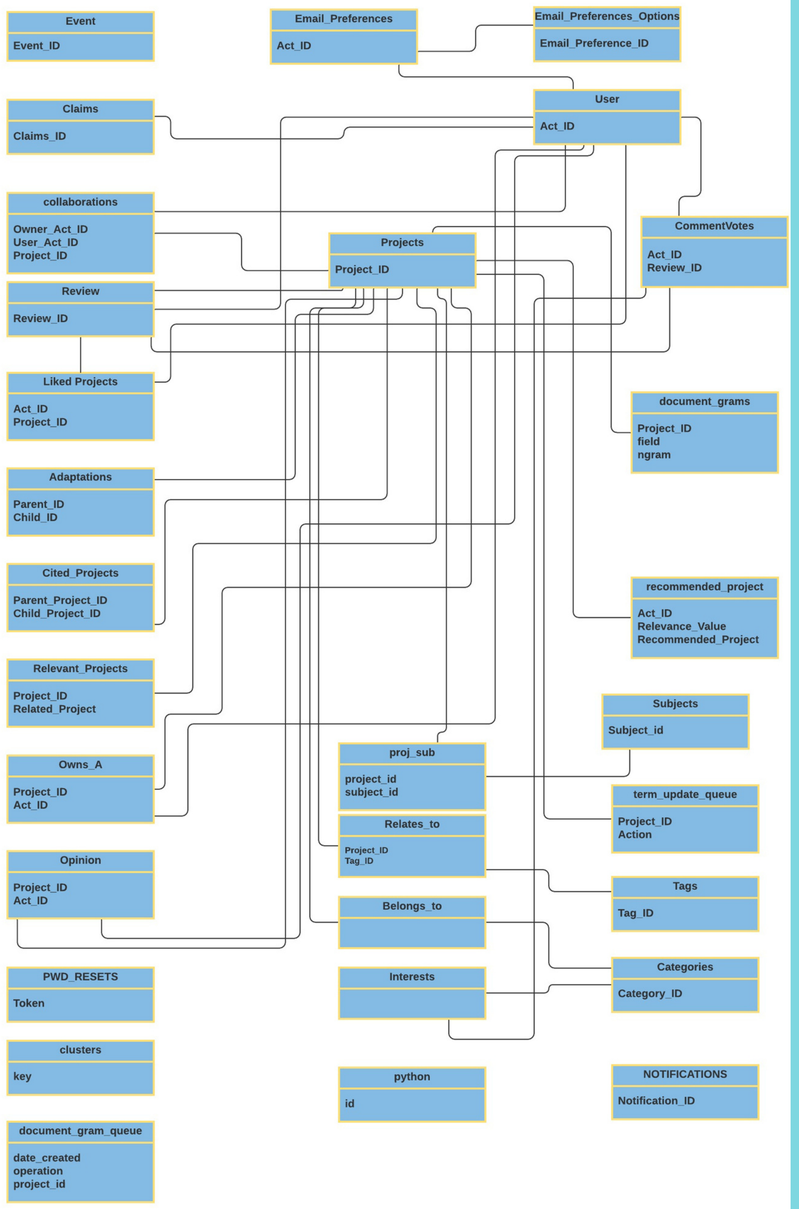
COLLABORATING ACROSS BOUNDARIES (CAB)

TCNJ THE COLLEGE OF NEW JERSEY

CAB

Is a web-based portal that involves collaborations with classes across the range of NSF-supported disciplines including but not limited to he natural and social sciences, technology, engineering and mathematics. It aims to build relationships between people of different disciplines and local communities. CAB uses concepts of human computation, social computation, crowdsourcing collective intellegience, and propagation of ideas. The necessary languages required to learn include html, php, python. The UML on the right side is a dipcition of CAB's database. Each database table is relevant to the make-up and structure of CAB. For example the adaptations table holds projects that are adapted from other projects and storing them as Parent_ID and Child_ID.



HUMAN COMPUTATION AND GAMIFICATION

Is the idea of using human effort to perform tasks that computers cannot yet perform. A particular computational problem must have significant value for people/workers to work on them. We look at mulitple concepts that can engage such activity: monetary gain, casual games, and learning. The goal of the requester would be to solve a computational problem in the most effecient and accurate way. We look at examples like duolingo which focuses on learners to translate the web. It's purpose is to translate languages byt ransforming a heavily time consuming and expensive effort for computers, into educational tasks that students can do, so that they solve the problem but they also learn. We also look at casual games which are very appealing because of they can be accessed online easily with no set up, they have easy controls, they allow players a lot of opportunities to scor, they can be consumed in short periods of time,and they are typically inclusive, gender-neutral, and contain little to no violent content. An example of this would be the ESP game created by Louis Von Ahn. The purpose of the game is to engage pairs of players in a simple game, where they tag images independently and are rewarded when the tags match. In addition, the widespread secuirty measures, captcha/reCaptcha use human computation concepts; reCAPTCHA displays words taken from scanned texts of old prints that Optical Character Recognition (OCR) software could not decipher. These solutions help with the digitalization of these prints because humans are better at recognizing distorted characters.

FUTURE PLANS

CAB uses concepts of gamification. Uploading and reviewing tasks on CAB would be tedious and time consuming. Therefore, by implementing points and using a leader board, CAB gives points to users who add a new project or event or if they review a project. The implemented gamification methods can be seen as a little out dated. I am looking at different models of Gamification in order to come up with or improve the already existing model of insentivising and motivating users to contribute to CAB so that it is a self-sustaining website..

Questions for the next steps of research and design:

1. How could we make it more interesting?
2. What does it mean to get a lot of points ?
3. What value do these points hold for users?
4. How could we use that information to maintain the system?

A well constructed system should be able to upport and provide the users by a means to make and monitor progress. handle obstacles that hinder progress and achieving their objectives. In addition, it would be requesters should be motivated by the need to solve a computational problem efficiently and accurately, while minimizing the cost.

CITATION:
Edith Law and Luis von Ahn. 2011. Human Computation (1st. ed.). Morgan & Claypool Publishers.

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