**Project Development Proposal**

**For**

Cards Against Telegram   
(C.A.T.)

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| --- | --- |
| **Instructor: David Augenblick** |  |
| **Team Members: Amir Omidi, Sagar Patel, Balaji Lakshmanan, Jessica Hoban, Tanfe Aderemi** |  |
| **Cycle: Winter 16-17** | 1 |
| **Date Submitted: 25 January, 2017** |  |

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**Grading Rubric – Project Development Proposal**

This rubric outlines the grading criteria for this document. Note that the criteria represent a plan for grading.

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| **Achievement** | **Minimal** | **Exemplary** | **Pts** | **Score** |
| Project Request |  |  | 10 |  |
| Scope of Effort | Students need to describe (3) levels of scope with a value of 10 points each. | Clear distinction between the (3) different scope levels with details. | 30 |  |
| Approach | Technical, 5 points  Management, 5 points |  | 10 |  |
| Major Deliverables | Students must describe a minimum of (3) the critical tasks for success, 10 points.  Students must identify and describe risks that relate to their project, 5 points. | Students describe a more than (5) critical tasks for success, 10 points. | 15 |  |
| Plan and Schedule | At least 30 tasks listed in their plan. | At 35-50 tasks in their plan all with dates and resources assigned. | 20 |  |
| Grammar and Spelling | Many serious mistakes in grammar or spelling | Grammar, punctuation, and spelling all correct | 10 |  |
| Tone and Presentation | Difficult to follow, but can be understood. Deduct 4 points if submitted document still contains items related to the template. (< fields >, Word comments) | Clear and concise. A pleasure to read. | 5 |  |
| Late Submission | Deduct 10 points if 24 hours late. Deduct 25 points if 48 hours late. |  |  |  |
| **Total** |  |  | 100 |  |

**Project Development Proposal**

**Project**

## **Project Request**

This project will incorporate Cards Against Humanity onto Telegram, which is accessible on a multitude of platforms, using Telegram’s bot API (https://core.telegram.org/bots/api). We will require a Telegram user interface that will allow the group to initiate the game with up to four players. The Czar, player who controls the black prompt cards, will need to be selected randomly at the end of each turn. Each other player is given white answer cards randomly selected from the preset deck chosen by our bot (http://t.me/CardsAgainstTelegram\_Bot). After the players answer, we will need to have the Czar vote for the winning player. The score for the winning player each turn will need to be incremented and displayed to the players.

## **Scope of Effort**

**Critical priority:**

* Creating a user interface inside the Telegram messaging application (https://telegram.org) to create a playable version of Cards Against Humanity.
  + This user interface will use custom keyboards, inline buttons and other UI elements to make the experience of playing the game seem natural and intuitive.
* Parsing card packs available online and make them available through telegram.
  + Parsing json files for card packs and loading them into memory.
* Allowing the player to invite their friends into a game lobby.

**“Nice to have” priority:**

* A website where users can learn about the game, its functionality and then offer a link to download the client and communicate with our application.
  + The website would be a one stop hub with information on the game- how to install and play the game using Telegram, information and introductions for the development team, a development blog so users can be aware of current and future development issues or projects regarding the game, and an option to contact the development team to report bugs or feature requests.
* Allowing the player to pick what card packs they want to play with.
  + The game will have a bunch of preloaded card packs stored in memory, the player will be able to choose their card pack when setting up the lobby.
  + The player can turn on and off specific card packs or specific white or black cards.
* Creating a player management system, allowing the creation of public games and letting players join matchmaking and find public games and join them.
* Create a child suitable version of the game that removes some of the more mature cards.

**Future Considerations priority:**

* A global leaderboard that keeps tracks of users with high scores, then pairs them together to compete on a higher level, essentially creating a social discovery platform for the high level users.
* Keeping track of user scores to determine high-ranking players, then giving them the option to be paired together to compete in a game for elite players only. This feature adds a social discovery element to the game, so instead of playing with just friends, users can meet new people around the globe and play with them.
  + This would essentially be “competitive” or “ranked” as other games put it.
  + Allowing players to compete for the “World’s Worst Person” title.
* Creating an interface to play the game through the web without needing the Telegram client.
  + Move it from a IM application to a web based game, allowing for a larger audience to play the game.

## **Approach**

**Technical**: We will be using the git protocol through BitBucket for version control purposes. The development will be separated into two teams of frontend and backend. The frontend team will be responsible for designing the UI and UX while the backend team will implement common methods through an interface design.

The development will use abstract and interface classes through Java so each team can complete their tasks without having to wait on each other.

**Management**: Jessica will oversee group coordination and assignment of tasks, as well as completion of documentation and deliverables on time. Assigned roles are as follows:

Balaji: Developer

Tanfe: Developer, Issues management coordinator

Sagar: Developer, Testing coordinator

Amir: Developer, Technical support resource, Code version control manager

Jessica: Developer, Project manager, Planning and scheduling coordinator

## **Major Deliverable**

* We must be able to create an easy-to-use user interface for the game to be played. The messages sent by the bot should be clearly distinguishable and the user must be able to reply from one of the various responses available to them. This will be available through a custom keyboard that will remove cards (button values) that have been used and replace them with new cards (button values). Keeping track of the cards of every player and replacing their cards after every turn will be the biggest challenge in this regard.

Due Date: 02/15/2017

* We must be able to provide users with the exact same cards from the original Cards Against Humanity game. We were able to find an official card pack from the Cards Against Humanity website in the form of a JSON. The biggest challenge would be for us to extract data from the JSON and store it in a data structure in Java for use in the game.  
  Due Date: 02/12/2017
* Cards Against Humanity is mainly a multi-player game. So, it is critical for the user to be able to play this game in a group. They would either be able to add the bot to their group or invite friends to a chat with the game in order to play the game. Getting the game logic working right is the first major concern. The second concern is being able to connect multiple users and still be able to maintain the same functionality.  
  Due Date: 02/15/2017

## **Plan and Schedule**

Phase One of the project is focused mainly on planning. Much of this preparation was addressed in the making of this proposal, such as assigning time frames for deliverables, assessing current project status, reviewing technological issues, etcetera. Phase One lasts until February 5th, 2017.

Phase Two will primarily center around the development of the Cards Against Telegram software. This includes the logic behind basic game functions such as card distribution and prompts, incorporation of the Czar cycle, and keeping track of scores, among other functionalities. Phase Two lasts until February 15th, 2017.

Phase Three will concentrate on testing and deployment. Tests for single player, multiplayer, and tests on multiple platforms will all be conducted. Following our presentation, we will seed the final product to classmates for further testing and feedback. Phase Three lasts until March 24th, 2017. This allows plenty of time to troubleshoot and fix unanticipated problems.

Some critical task dependencies include developing the game for a single player (i.e. developing the game logic) before working on connecting multiple players. The game must also be functioning to a certain extent before tests can feasibly run on it. These initial tests will be focused on single players, then will expand to multiplayer scenarios. Finally, the user interface must be developed before running tests on multiple platforms to test for design issues.

Below is the Gantt Chart for this project.

