

Kitty WAR

iPhone App Card Game
By Team Dog and Koala Bear

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Project Motivation



WE LOVE CATS! WE LOVE CARD GAMES!

Project Goal

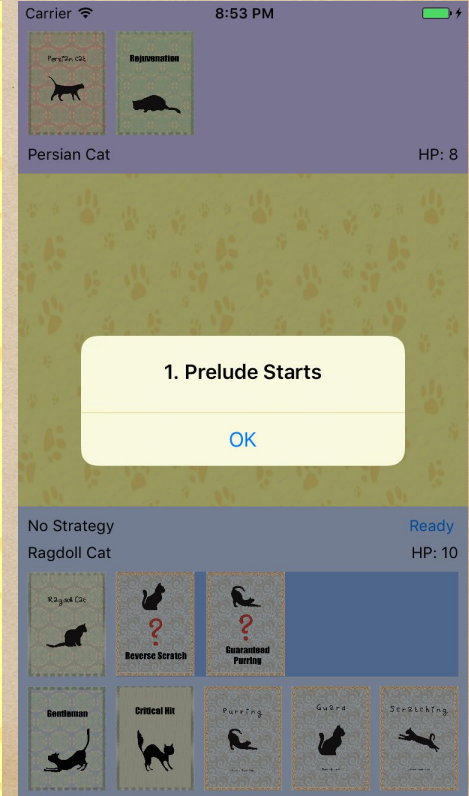
-  Users are able to register their accounts via both the website and the iPhone app.
-  The server matches two players with closing level of skill into one game.
-  During the game, two players choose their representing cat cards and battle against each other by following the Kitty War Game Rule.
-  Build a server that handles multiple clients and runs several matches at once.

Biggest Challenges

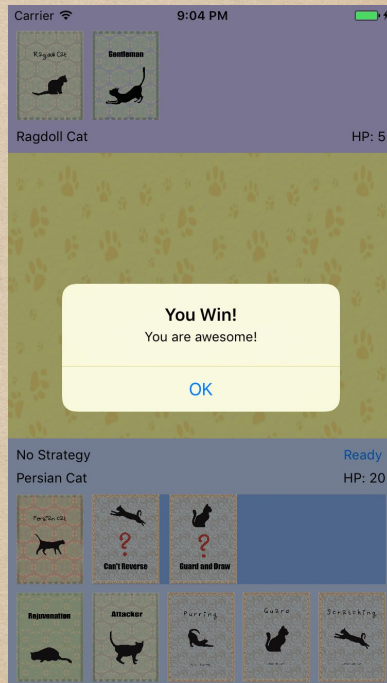
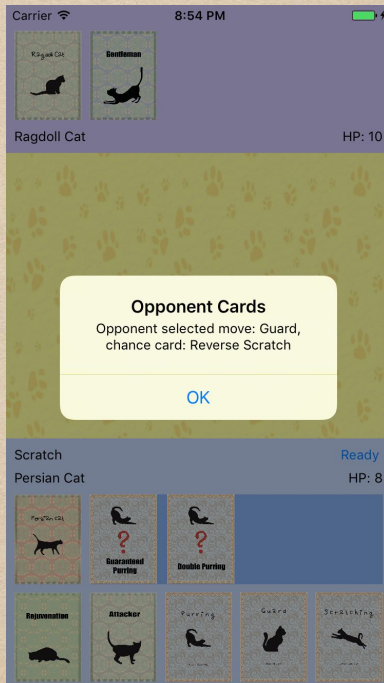
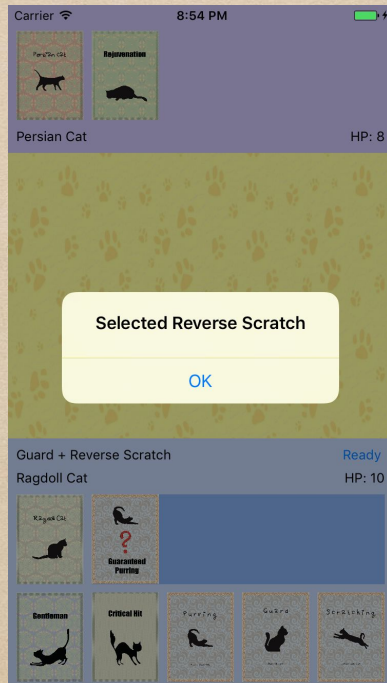
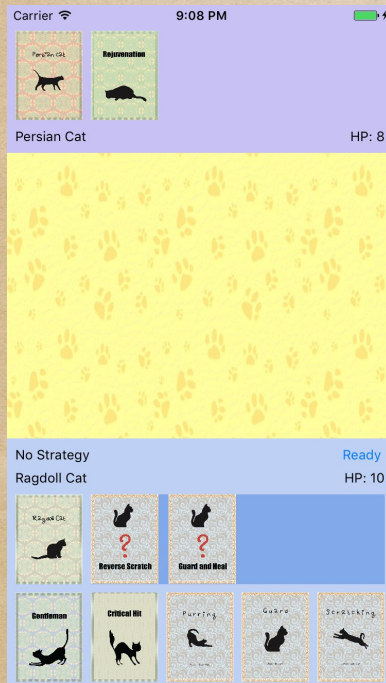
- ❖ Debugging problems related to the network/threads between server and iPhone
 - Dropped connections
 - Thread Synchronization
 - Secure logins
- ❖ Learning and applying new technologies to create a working game
 - Team unfamiliar with databases and languages used
- ❖ Sticking to the sprints and the time allotted by each
 - Very tempting to continue work outside a sprint

Accomplishments

- ❖ Our game is **complete** and **playable!**
 - Registration through website and iPhone app
 - Login and play via iPhone app
 - Server supports multiple connections and matches
 - Data properly synced between python server and iPhone client



Accomplishments



Accomplishments

R2g.doll Cat



Persi2n cat



Scratching



Attack another cat!

Critical Hit



Longliness



Guard and Heal

Guard



Protect yourself

Purring



Increase Feasibility

Attacker



Hunting



Can't Reverse

Spotlight



Accomplishments

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> auth_group	★ Browse Structure Search Insert Empty Drop	0	MyISAM	latin1_swedish_ci	1 KiB	-
<input type="checkbox"/> auth_group_permissions	★ Browse Structure Search Insert Empty Drop	0	MyISAM	latin1_swedish_ci	1 KiB	-
<input type="checkbox"/> auth_permission	★ Browse Structure Search Insert Empty Drop	33	MyISAM	latin1_swedish_ci	5.6 KiB	-
<input type="checkbox"/> auth_user	★ Browse Structure Search Insert Empty Drop	9	MyISAM	latin1_swedish_ci	4.1 KiB	-
<input type="checkbox"/> auth_user_groups	★ Browse Structure Search Insert Empty Drop	0	MyISAM	latin1_swedish_ci	1 KiB	-
<input type="checkbox"/> auth_user_user_permissions	★ Browse Structure Search Insert Empty Drop	0	MyISAM	latin1_swedish_ci	1 KiB	-
<input type="checkbox"/> django_admin_log	★ Browse Structure Search Insert Empty Drop	0	MyISAM	latin1_swedish_ci	1 KiB	-
<input type="checkbox"/> django_content_type	★ Browse Structure Search Insert Empty Drop	11	MyISAM	latin1_swedish_ci	3.3 KiB	-
<input type="checkbox"/> django_migrations	★ Browse Structure Search Insert Empty Drop	31	MyISAM	latin1_swedish_ci	3.6 KiB	-
<input type="checkbox"/> django_session	★ Browse Structure Search Insert Empty Drop	1	MyISAM	latin1_swedish_ci	3.3 KiB	-
<input type="checkbox"/> KittyWar_abilitycards	★ Browse Structure Search Insert Empty Drop	8	MyISAM	latin1_swedish_ci	3.8 KiB	-
<input type="checkbox"/> KittyWar_basiccards	★ Browse Structure Search Insert Empty Drop	3	MyISAM	latin1_swedish_ci	3.4 KiB	-
<input type="checkbox"/> KittyWar_catcard	★ Browse Structure Search Insert Empty Drop	6	MyISAM	latin1_swedish_ci	5.2 KiB	-
<input type="checkbox"/> KittyWar_chancecards	★ Browse Structure Search Insert Empty Drop	9	MyISAM	latin1_swedish_ci	2.7 KiB	-
<input type="checkbox"/> KittyWar_userprofile	★ Browse Structure Search Insert Empty Drop	14	MyISAM	latin1_swedish_ci	2.4 KiB	-
<input type="checkbox"/> KittyWar_userprofile_cats	★ Browse Structure Search Insert Empty Drop	8	MyISAM	latin1_swedish_ci	5.1 KiB	-
16 tables	Sum	133	MyISAM	latin1_swedish_ci	47.4 KiB	0 B

health	title	description	ability_id	default	cat_id
<input type="checkbox"/> Edit Copy Delete	8 Persian Cat	The Persian cat is a long-haired breed of cat char...	0	1	0
<input type="checkbox"/> Edit Copy Delete	10 Ragdoll Cat	The Ragdoll's sweet temperament is probably its mo...	1	1	1
<input type="checkbox"/> Edit Copy Delete	10 Maine Coone Cat	It has a distinctive physical appearance and valua...	2	0	2
<input type="checkbox"/> Edit Copy Delete	10 Exotic Shorthair Cat	The Exotic Shorthair is a breed of cat developed t...	3	0	3
<input type="checkbox"/> Edit Copy Delete	10 Siamese Cat	The breed standard of the modern Siamese calls for...	4	0	4
<input type="checkbox"/> Edit Copy Delete	10 Abyssinian Cat	The Abyssinian is a breed of domestic short-haired...	5	0	5

Technologies

- ❖ Web application: HTML / CSS / Javascript
 - Bootstrap (Framework)
- ❖ Server: MySQL, Django, Python
 - MySQL Workbench (DB Management)
- ❖ iPhone App: Swift, Xcode
 - SwiftSocket (Network Library)

Project Management Techniques

- Scrum Board: Trello
- Communication: Slack, Scrum Meetings
- Other: Google Docs (Shared Documentation)

Things We Enjoyed

- ❖ Working together
 - Scrum meetings encouraged communication, this helped our team get to know one another and get along
- ❖ Apply techniques learned from class
 - Dependency Injection to decrease coupled code
 - Unit testing
 - Reviewing code with teammates
- ❖ Learning new technologies
 - Django for web server
 - MySQL Databasing (Learning to manage and create queries)
 - Adobe illustrator for drawing cards
 - Socket programming used for sending data between client and server

Things We didn't Enjoy

- ❖ Apple updates Swift too often, need to catch up with newest language features
- ❖ How brittle systems can be when using multithreading and networking together

Things We Will Keep Doing

- Scrum meetings for essential discussion
- Using Trello, Slack, and Google Docs for communication for sharing

Things We Will Stop Doing

- Meeting at random locations (under the bridge)
 - a. Always met in a random locations. Caused confusion on where we would meet next and wasted time.
- Lack of time estimation
 - a. Didn't consider work hours needed to complete tasks. Lead to overestimation and underestimation.