ReadySet Go Team Meetings

9/16

Meeting with client (Dr. Ma)
- Discussed various features for the AlphaGo project
  - Certificates for https
  - User registration
    - Should have a profile with statistics such as their winrate, # of games played, etc
  - User can play against another player or choose an AI agent to play against
    - Different stats for both?
  - Researchers
    - Can train AI with different parameters
    - Params can be variable
    - Should deliver results (specifics needed) to user smoothly
    - Create UI for AI training
  - NOTE: most scripts and AI are already built, we do not have to create them, mostly implement an online version for the system already in place
- Other misc notes on project
  - We will have access to a Ubuntu web server, can install Tomcat or others onto it
    - We can determine what database to use
  - LeelaZero- engine to run Go games
    - We need a middleman program to allow Go engines to communicate

Team Meeting
- Discussed Team Roles
  - Kien- Team Lead- will be main point of contact with client
  - Ryan M- Documents/Planning manager- will keep track of group documents and scheduling
  - Derek- Backend Leader
  - Christian- Frontend Leader
  - Ryan C- Database Leader
  - NOTE: all team members will work on all aspects of project, but leaders will have more control as to how/what is implemented in their area
- Discussed Team Name
  - ReadySet Go
- Discussed programs to use in development

- ○ Jira
  - ■ Organizational workflow software for keeping track of tasks/features to implement
- ○ GymGo
  - ■ Good for running Go games on web
  - ■ Python based
- ○ Frontend Go Board
  - ■ Considered using JS for this?
- ○ Python stack
  - ■ Will likely be main language for development
  - ■ Flask or Django (yet to decide)
- ○ GitHub
  - ■ Members will join a group archive to work off of
- ○ Sabaki
  - ■ Open-source middleman program for Go
  - ■ The team could refer to its code base for GTP handling
- ● Next meeting
  - ○ Discuss more specific requirements with client
  - ○ Make decision on python stack to use
  - ○ (Opt) set up Jira
  - ○ Begin allocating tasks for development
  - ○ Begin work on planning documents
    - ■ Vision Doc
    - ■ Weekly activity report?
    - ■ Use Cases

9/23

Contacted client for meeting, no response
Team meeting
- ● Worked through Vision Document
  - ○ Delegated each team member to work on one section, but communicating with each other.
- ● Deployment decisions
  - ○ Decided to use Spring instead of Python stack
  - ○ Decided to use MongoDB for database
- ● Next meeting (Fri 9/25 @2PM)
  - ○ Walk through similar offline programs to get an idea for how gameplay will be handled
  - ○ Hopefully meet with Dr. Ma to get more requirements
  - ○ Discuss Sabaki, program for handling specifically online Go games

9/25

Team meeting

- Went over vision doc to ensure all segments are correct
- Discussed setting up website- Ryan M.
- Questions to ask client
  - Limit on maximum number of users
  - Mobile deployment options
- Will discuss with client outside of meeting
- Next meeting
  - Discuss first features to implement on project (likely login)
  - Review client requirements, update documents if necessary
  - Begin work on use cases

9/30

Team meeting

- Todo
  - Set up use case doc (Ryan M)
    - Fill in use cases (ALL)
  - Set up WAR doc (begin filling in starting next week) (Ryan M)
  - Update team website (Ryan M)
- Went over Sabaki GO engine.
  - Middle man for all GO engines
  - Can designate 2 agents
- Go Text Protocol
- List of Use cases
  - Make account- Christian
  - Login- Christian
  - Players
    - Edit profile- Derek
    - Delete Profile- Derek
    - View Stats- Ryan M
    - View game files- Ryan M
    - Delete Saved Game- Ryan C
    - Play game- Ryan M
      - Extension- Saving game file
  - Researchers
    - Can do all actions of a player, plus…
    - Set parameters/train AI agent- Ryan C
      - Extension- create new agent to train
    - Publish trained AI agent to become playable- Kien

- - - ■ View training metrics/results (ELO rating, graphs)- Kien

Client Meeting- Requirements
- User profiles
  - Name
  - Username
  - Email
  - # of games played
    - winrate
  - Able to save game replays
    - Possibly save last 10 by default, option to save additional
  - Can update/delete their own profile
- Playing mode
  - Set parameters, choose AI agent
  - During game, AI can give hints
    - Designate teacher AI
- Researchers
  - (PENDING) Update the different AI for training
  - Set parameters and train AI agent
    - Can also start from base agent (no previous training)
    - Board size, # of games, etc
  - Results
    - Generation of AI
    - # of games played
    - Should also alert user to progress of training
    - Graphical representation of critical stats vs generation
  - Search for games with specific move patterns
  - Automatically save games
    - Researcher should be able to view specific games
  - (PENDING) Researcher can publish agent/games to GitHub
- (OPTIONAL)
  - Play vs other people (much more complicated system)
    - Only look into this feature once other system is up and running
- Prioritize player features over researchers

10/7
Team Meeting
- Database progress
  - Mongo Atlas
  - Working framework schema
  - Packages for connecting to Java server

- Frontend Progress
  - UI for Go game
    - React framework
- Prototype
  - Balsamiq
  - Different pages
    - Splash page (Choose to login or sign up)- Ryan C
    - Registration page- Ryan C
    - Login Page- Done
    - Home Page- Christian
    - Profile Page- Ryan M
    - Play setup page- Ryan M
    - Play window- Derek
    - Research page- Kien
- After Prototyping
  - Get user login functional
  - Work on Go board UI

10/14
- Team meeting
  - Documents to complete for next week
    - Software development plan
  - Development Plan Doc
    - Iteration 1
      - Focusing on login and user management
        - Login
        - Registration
        - Add/Delete user
        - Game/Match history
          - Use mock database for presentation
        - Research (all done on backend)
    - Iteration 2
      - Implement game playing
        - Interface and player experience
  - Login
    - Password hash function- Derek + Ryan C.
  - Registration

10/21

Team Meeting
- Accomplished so far
  - Registration functional
  - Login in progress
- Goals for this week
  - Frontend design for login, registration pages- RM, CA
    - Want to give it a more Chinese aesthetic
    - Meet on Friday
  - Database for registration
  - Presentation slides- RM

10/28

Client Meeting
- Prototype notes
  - Meet the team on splash page
    - Info about Go
    - Info about research project
    - Background image on splash page (ratio)
  - Only researchers can train
  - Profile page
    - Separate profile (user info) and game info
  - Play page
    - Allow user AI to get hints
    - Allow user to toggle teaching mode, which will enable the hint button
    - Undo button?

Team Meeting
- Went over setting up project environment on each member's computer locally
- Questions to ask
  - Microservices
  - Encrypting client requests
  - Sending html from front to backend
- Next big task
  - Profile

10/31

Team meeting
- Discussion on connecting frontend to backend
  - JSP- frontend template for springboot

- ○ Thymeleaf
- ○ Vue-for gameplaying
- ○ SPA

11/4

Client Meeting
- Progress Check
- Proposed idea for Latex documentation
- Email authentication
  - ○ **Will need mail server for sending verification emails**
- Proposed idea for phone number authentication and login
  - ○ Automatic profile/data deletion after extended period(6 mo?)

Team Meeting
- Likely will not have research operational before iteration 1 presentation
  - ○ Can still create UI and API request
- Plan on merging together all we currently have for iteration 1 on Saturday
- Should ask Dr. Ma how roles are assigned.

11/7

Team Meeting
- Presentation next Friday (or Monday after)
  - ○ Ryan M and Kien heading up presentation
  - ○ Will have a functional login, user profiles, and UI for research
    - ■ Need mock data
    - ■ Research will not be fully functional
- UI for profile, stats, and research will be sent to Christian from Ryan M
- Derek's pull request accepted,
  - ○ Kien and Ryan C will implement end points for get profile and increment wins/losses

11/11

Client Meeting
- Went over implemented features
  - ○ Authenticated sign in, email verification, protected pages, research UI
- Iteration 1 features not implemented yet
  - ○ Research commands
  - ○ edit/delete profile
  - ○ Save/delete game
- Go game interface discussion

Team Meeting
- Go over completed features for presentation

11/18

Semester Wrap-Up meeting
- Client overall satisfied with iteration 1
- TCU server and domain acquired, can begin to deploy features
  - May need another server for decoupled front/backend
  - AWS, heroku for hosting frontend
- May bring on supplemental team member, proficient in game playing features
  - Khiem Nguyen
- Plan for winter break
  - Finish up features from iteration 1
  - Research game playing source code

12/8

Winter Iteration
Client Meeting
- Web server is up and running at ai.tcu.edu
- Just have to put a working build up
- Mock Go game file created
- Frontend training and delete account created, need to connect to backend
- Training code is being optimized

12/11

Team Meeting
- GPU Server will be set up soon
- Need separate servers for research and gameplay

12/15

Team Meeting
- Refactored training code for web application
- Setup on live server in progress
- Plan to finish up iteration this week

12/18

Team meeting
- New Go framework found, WGo
  - Easy implementation, should work with the rest of the project
- Backend research training framework shown

12/22
Client Meeting
- Client enabled port forwarding
  - Need to debug
- Recaptcha needs to be implemented on live server

1/5
Client Meeting- New Year
- Problems with running the monolithic server
- Progress
  - Working on static pages for home (about, how to play)
  - Research can now ssh into commands, save new copy of AI agent

1/8
Team Meeting- Iteration 3 Planning
- Need frontend code for research
- Need frontend + UI for setting up gameplay
  - Automatically save games, redirect to profile page after game ends
- Gameplay implementation- may need parallel sockets
  - Can try to host the game board on frontend via React

1/11
First meeting with Dr. Krishna/Dr. Wei
- Greetings, check in on break progress
- Spoke about live server issues
  - If issues persist, AWS may be an option
  - Discuss with client about preferences and restrictions
- Should Update Release plan & WAR, discuss with client at next meeting

1/22
Meeting with Dr. Krishna
- Set up scheduled meetings for the semester

- - Wednesday at 11:00 weekly
  - Went over total progress so far
    - Basic website setup, CRUD operations for users, backend code for research, SSH into server, create new record for AI agents, offline gameplay progress working
    - Todo
      - Frontend for research
      - Gameplay implementation
      - Live Server Setup

1/27

Agenda
- Discuss server issues/possible solutions
- Get info about research team/project from client for research team page
- Check in with Dr. K

Meeting with Dr. K
- Kien, RyanC working on gameplay
- Christian, RyanM working on various UI and frontend/backend connection
- Derek working on unit tests
- Issues with server hosting
  - IT not cooperating, server still down
  - Give them a week to help, then discuss moving everything to other servers, like AWS
    - Will likely need a second server to communicate with TCU vpn
- Peer Reviews will be going out soon

2/3

Agenda
- Discuss release plan moving forward
- Progress check in with Dr. K

Meeting with Dr. K and Dr. Ma
- Progress check
  - Server is functional/live
    - Needs to be updated to latest version, but it is operational
  - Moving forward we are hoping to not use ssh, but purely http from gpu server
  - Research UI reworked to include AI agent profile
    - Next step: allow researcher to publish AI agents

2/10

Agenda
- Progress check
- Discuss next week plan

Meeting with Dr. K
- About and agent page set up
- Various bug fixes
- Manual for user cases
- Primitive gameplay server is active
  - Need to look into authentication
- We guess that the work is approximately 70% done
  - Still seem to be on track
  - Will start to connect larger pieces (like gameplay/training) soon

2/22

Meeting with Dr. K and Dr. Ma
- Progress check (Snow days slowed progress)
  - Various UI pages tweaked and metrics page added ELO graph
  - Metrics connector code created
  - Play on 7x7 board operational
  - Various bug fixes with user authentication and password reset
- Todo
  - Admin page for user and agent control
  - Pregame setup page
  - News page
  - Work on replay feature
  - Continue putting pages on live server

3/3

Meeting with Dr. K and Dr. Ma
- Progress check
  - Admin page UI and routes created, need to connect
  - Pregame UI created
  - News page setup
    - Need to rework wording
  - Sign up altered to include researchers
  - Play and replay are functional on 7x7 board
- Todo
  - Frontend/backend routes

- ○ Setup hint feature in gameplay
- ○ Tweak wording/UI based on client feedback

3/12

Meeting with Dr. K and Dr. Ma
- Frontend backend code in progress (Metrics, training, etc)
- Need to meet with client for fine tuning wording on news page
- Training script being worked on to be more dynamic
- Profile page now functional (Static pages should now be easier to connect)
- Gameplay and admin routes in progress
  - ○ Hint feature put on temporary hold until gameplay is completely functional
- Todo
  - ○ Continue working on gameplay
  - ○ Meet with Dr. Ma about fine tuning
  - ○ Continue connecting pages to live server
  - ○ Work on SRS presentation

3/17

Meeting with Dr. K and Dr. Ma
- Progress
  - ○ Training script working, needs to be pushed
  - ○ Hint feature operational
  - ○ Training operational, client requests some tweaks
  - ○ More progress on static connector code (need to push)
  - ○ Gameplay seems to be operational
- Todo
  - ○ Make SRS poster
  - ○ Finalize training
  - ○ Publish gameplay on main site
  - ○ Save game/Replay functions

3/24

Meeting with Dr. Ma
- SRS Poster prototype shown
  - ○ Client feedback requires edits
- Training fully functional (sans testing)
- Play backend routing operational
  - ○ Needs frontend work
- Hint feature done, save file working

3/29

Meeting with Dr. K and Dr. Ma
- Will meet on Wednesday for full demo
    - Record meeting
- Plans to have everything posted onto the server by weekend
- Poster revisions needed (due April 1)

3/31

Client Acceptance Test
- Demo of all features
- Critiques/Todo
    - Add reCaptcha for all users or approval process for all users, not just researchers to prevent injection attack
    - Add line to tell that researchers will be notified on approval or denial
    - Fix bug on researching
    - Make metrics prettier
    - Implement gameplay onto main servers
        - Make UI better for gameplay
    - Add hint to replay?

4/7

Meeting with Dr. Ma and Dr. K
- Google Analytics inserted into site
- Gameplay operational
- Will have Dr. Dou and other users perform user tests
    - Create universal spreadsheet to share with testers
- User manual (overleaf for Latex)
- Videos for demos in final presentation
- Plan to have Jar updated by Monday

4/14

Meeting with Dr. K
- Gameplay not fully operational, multiple connections causing issues, ip address missing
    - Everything working locally, just deployment causing issues
- Postgame finished
- Frontend all finished
- Planning to have everything operational by the end of today

4/16

Meeting with Dr. K and Dr. Ma
- SRS today, fully prepped and ready
- Site ready for testing
    - Firewall issue fixed by TCU IT department
    - Derek and Ryan C. fixed
- Todo
    - Promote Ma to researcher/admin
    - Minor bug fixes
- Next time
    - Documentation
    - Final fixes
    - Wait for testing/bug fixes

4/21

Meeting with Dr. K and Dr. Ma
- Site improvements
    - Gameplay fully operational
    - Replay operational
    - Hint fix waiting to be deployed
    - HTTPS now enabled (was IT firewall issue)
    - Video demos complete
- Ma improvement list (to be implemented by 4/27)
    - Change site title to Go 2 AI
    - Main splash page text change to "Let us Go then, you and I …"
    - Change order in header to About Us, News, How to Play, Sign-In
    - Change footer to be visible when logged in only
    - Various changes to About Us page, sent in email (Done)
    - distinguish that email has not been verified/approved
    - Add Admin functions to user manual to update About Us/News pages

4/28

Meeting with Dr. K and Dr. Ma
- Go over improved slides
- Much better
- Add animations?