# Project Specification for Group # 179

**[see additional instructions on Quercus for filling in all parts of the blueprint]**

## Team Name: Chess

## Domain:

Chess puzzles and Ranking system

## Software Specification:

[In plain English, **what** should the program be able to do (not **how** should it do it)]

[think in terms of nouns and verbs, which will map onto variables and methods in the program]

The domain will be able to generate random chess puzzles with options for daily, random puzzles, or specifically themed puzzles. A user will be able to view their puzzle statistics or review past puzzles within the current session of the program. Users should have the option to log in or create an account **[built into the** **lichess api]**. If a user is logged in, they should be able to access any past puzzle scores or game histories they’ve played on that account.

## User Stories:

[statements of interactions between the user and the system]

[see additional instructions on Quercus]

[aim for at least one user story per group member + 1 extra; in the table below, **each group member must be assigned to one user story + mark one user story as being a team user story** — this one should be the one that is most central to the basic functionality of your system. That is, the one you would probably want to implement first.]

1. John wants to play a chess puzzle. He opens the chess puzzle player and clicks generate puzzle of the day. The chess puzzle of the day loads on screen. **[Michelle’s Story]**
2. Tom and Tim argued about who is a better chess player, so they decided to compare their Rank point of Ranking system. **[Jiaqi Ma’s Story]**
3. "As Mary hears about this chess puzzle, she wants to create an account and log in to start a puzzle. **[Chihana’s Story]**

Proposed Entities for the Domain:

[based on your specification, indicate a few potential entities for your domain — including their names and instance variables]

Chesspiece (Abstract):

String Color

HashMap Location

HashMap accessibleLocation

Player:

String Color

List<Chesspiece> chessPieces

Chesspuzzle:

Player blackPlayer

Player whitePlayer

Proposed API for the project:

[links to one or more APIs your team plans to make use of; include brief notes about what services the API provides and whether you have successfully tried calling the API]

<https://lichess.org/api>

Puzzles and user statistics(puzzle clear count, maybe analysis, maybe puzzle history) will be pulled from this API

## Scheduled Meeting Times + Mode of Communication:

[when will your team meet each week — you MUST meet during the weekly tutorial timeslot and we strongly recommend scheduling one more regular meeting time]

Meeting time outside of lab: **[indicate day and time here]**

Mode of Communication: **[Discord server]**