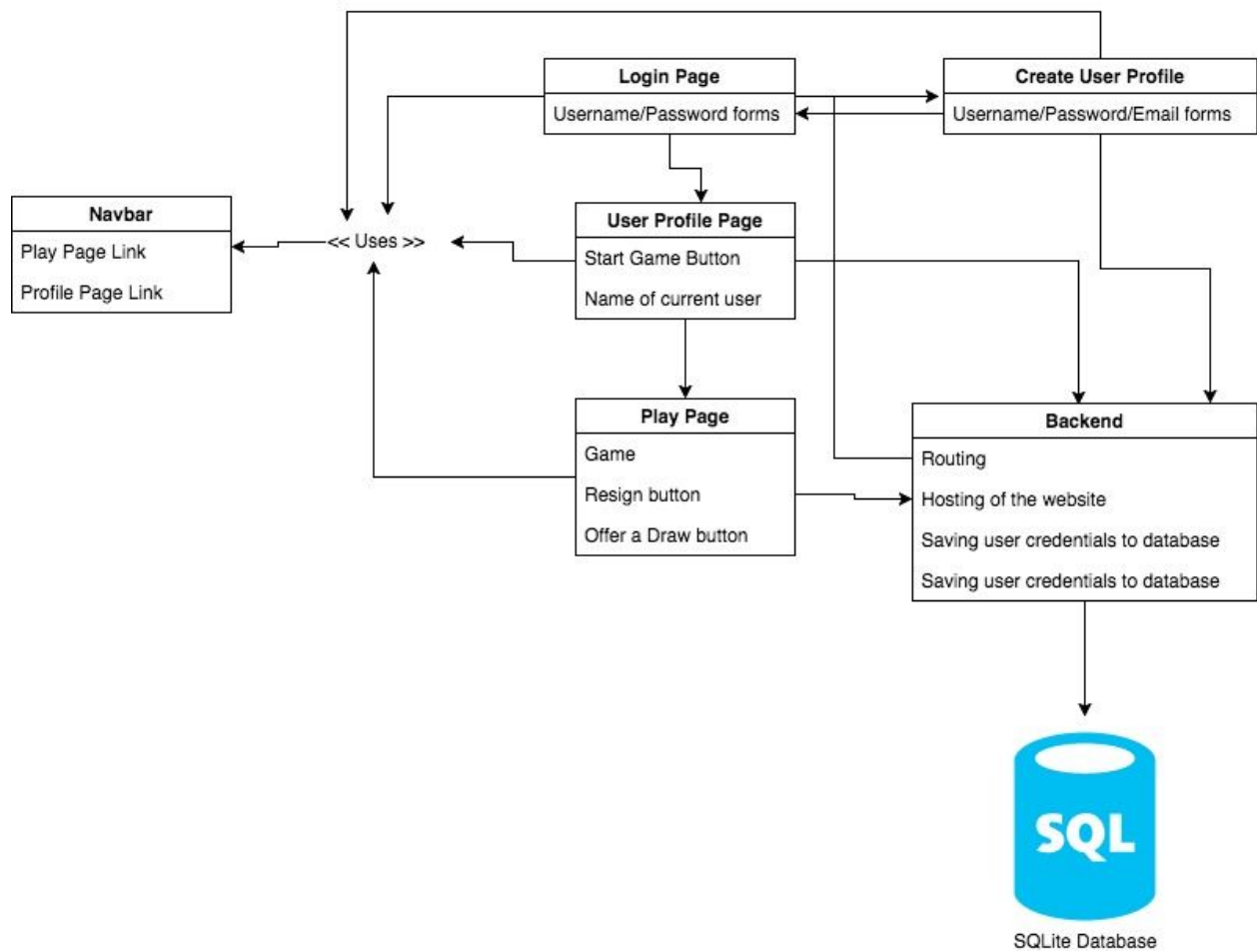# BoilerChess

Team 18 - Product Test Plan

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1. Classification of Components

Login Page		Create User Profile
Username/Password forms		Username/Password/Email forms

Navbar			User Profile Page
Play Page Link	<< Uses >>		Start Game Button
Profile Page Link			Name of current user

Play Page	Backend
Game	Routing
Resign button	Hosting of the website
Offer a Draw button	Saving user credentials to database
	Saving user credentials to database

SQLite Database

2. Incremental and Regression Testing

Chess.js

Incremental Testing

Num	Description	Severity	How Corrected
1	Certain move sets weren't very suited for testing	Medium	Refactored Chess.js code better suit
2	Move validation done client side may ignore attempted moves by other player	High	Have final illegal move checking on server side before sending to other player
3	No check for stalemate	Medium	If only to pieces left are kings, declare stalemate
4	Queening doesn't check if choice is valid, dead unit	Low	Instead of sampling deleting dead units, store them and remove if necessary.
5	Game was difficult to manage and maintain due to not have central location for all information	High	Created Game class which owns 2 player classes who own all of their pieces
6	Dead Pieces have nowhere to go and can occupy same space as other pieces	High	Added "alive" variable to piece to determine whether or not piece is displayed

Regression Testing

Num	Description	Severity	How Corrected
1	SQL server had mixed performance for team members	High	Switch to SQLite server for ease

2	It can be hard to tell which piece is selected	Low	Highlight selected piece with a different color
3	String sent to server was far too long and didn't follow clear format	Low	Change text to more readable size and color

Front-End Elements

Incremental Testing

Num	Description	Severity	How Corrected
1	No sanitization on input	High	Added sanitization
2			

Regression Testing

Num	Description	Severity	How Corrected
1	Failure to load ELO from backend crashes user badge in User Profile	High	Used JS "mustaches" to input variable and replaced w/ dummy for now

3. Product Backlog Update

Functional Requirements:

Backlog ID	Functional Requirement	Hours	Status
1	As a user, I would like to be able to create a profile which contains my email, username, password.	40	Complete
2	As a user, I would like to see my profile which will show the email, username.	10	Complete
3	As a user I would like to be able to play on my own without an opponent.	20	Complete
4	As a user, I would like a display showing all the past moves of the current game.	6	In Progress
5	As a user I would like to log in with my username and password.	10	Complete
6	As a user, I would like squares to be highlighted that are valid moves for the currently selected piece when it is my turn	6	Complete
7	As a user I would like my username and password to be saved for the next time I attempt to log in	10	Complete
8	As a user I would like to know if my password or username is incorrect	10	Complete
9	As a user I would like to know if the game has ended due to checkmate	20	Complete
10	As a user I would like to make sure all moves are final with no redo's	15	Complete