RB Consulting, Inc.

GameGoon

Design

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GameGoon Overview

GameGoon is a competitive gaming website where users pay an entry fee, play a game with one another, and win a portion of the entry fees. Users can use a credit card or PayPal to add funds to their accounts, create profiles and send direct messages to one another. We offer users the option to challenge other users directly, choosing the game, amount of money staked and other details. They can also compete in Quick Matches, public head-to-head matches, or Tournaments, where multiple users join and compete in a traditional bracket style for the prize, paying multiple places.

Users also have the option to create teams that can hold up to 10 users. Users can then compete as a team in any of the aforementioned play styles; challenges, quick matches and tournaments. Members pay a fee to participate in a match or tournament and winners receive winnings based on fees entered minus a percentage that is paid to GameGoon.

All of the GameGoon member features are provided through the web site. An summary of the features include:

* Register as a member
* Send/Receive internal messages
* Search for users and teams
* Create/Join teams (with a password)
* Challenge another user to a game
* Challenge a team to a game
* Join a Quick match (team or individual)
* Join a Tournament (team or individual)
* Paypal integration for payment processing
* Deposit/Withdraw funds
* Admin site - Create a Tournament
* Admin Site - Create a Quick game
* Admin Site - Resolve disputes/Handle refunds
* Admin Site - Maintain games

Technology/Approach

The database will be handled by MySQL. Implementation will be PHP on an Apache 2 server. The system is hosted on an AWS ec2 server. The entire application is web based. We will start out supporting the latest versions of Microsoft Edge, Internet Explorer, Chrome, and Firefox. We require the following from our developers:

* Regular (daily) commits of work to our GIT repository.
* Branches will be created in GIT to support work that has not yet been completed.
* We will review code regularly for adherence to PHP security standards.
* Weekly status of work done the prior week and planned for the upcoming week.

Registration

Registration requires a name, password (and confirmation), email, dob, screen name (18 character mx), state (some may be excluded), country, a captcha control, and they must accept terms of use.

Once a member has registered they are taken to a Congratulations page and a confirmation email is sent out with a confirmation link. Clicking on the link activates the account so they can login. When a member logs in they will land on the Member Home Page.

The “My Account” link is below the “Edit Profile” link, found when clicking on the profile icon in the header. On the My Account page, users can change their login password, as well as their personal details that are used when users submit a funds withdrawal. These personal details are as follows: First name, Last name, Address, City, Country, State, Zip, Phone number. Personal details are not displayed anywhere but the user’s own My Account page.

Users can also choose whether or not they want to receive emails from the site, as well as

emails notifying them when their matches become fixed.

Member Home Page

When a user logs in they will be taken to their home page. This will display a summary of their account and activity (wins, losses, reputation, country, date joined, last login, and account balance). This page will also provide links to the following actions:

* Games
* Challenges
* Tournaments
* Quick Match
* Community
* News
* Deposit Funds
* Cashier/Withdraw funds
* Edit Profile

They will also be able to follow links/tabs to view account information including: Discussion board (history), current games/tournaments, leave feedback, and team info.

The profile page consists of four main areas.

The first is the top horizontal bar that contains the user’s avatar, username and twitter, as well as the user’s winnings. The winnings information for each user on the site is calculated by taking all of their past matches in which the user won and then adding them together. If the profile page is being viewed by a different user, there will be an icon, Message User.

The second area contains all of the user’s contact information, the user’s age, country and the user’s Wins and Losses. User’s wins and losses are calculated by adding up the amount of matches the user has entered and has either won or lost. The contact information is as follows: Steam ID, XBL Gamertag, PSN ID, Nintendo Friend Code.

The third area is the user’s My Team area. This area contains either a “Create a Team” button if the user has yet to create a team or it displays the icon and team name of the team that the user has either created or joined. If the user is the team founder, there will be two additional buttons: Edit team and Leave Team. If the user has joined a team but is not the founder, there will only be one button: Leave Team. These buttons are only viewable on the user’s own profile page, not when viewing other user’s profile pages.

The fourth area is the user’s match history table. This table contains the user’s past match history, with the most recent at the top. 10 entries are displayed and then paginated. The match history includes match name, entry fee, prize won (if any) and the date/time of the match.

Users are able to send direct, private messages to one another. These messages are stored in the user’s Inbox page.

Users click on their profile icon in the header to get a drop down list, containing the “Edit Profile” link. On the Edit Profile page, users can configure their contact info -- Steam ID, XBL Gamertag, PSN ID, Nintendo Friend Code. Users can also upload an avatar that should be squared once uploaded, maximum 500kb.

Users can select location (a text area, different from country which is not able to be changed). Users can select from a drop-down of choices regarding the range of money they are willing to play other users for. Finally, users have another text field where they can type what games they are willing to play other users in, as well as any game specific info. All of this information is displayed on the user’s profile page.

Users who have created teams are team founders. A team founder has the ability to edit team info by clicking on the Edit Team button on their profile page. This button is available after a team has been created. Team founders can change the team join password, upload a team avatar, change contact information (same fields as individual user profile -- Steam ID, XBL Gamertag, PSN ID and Nintendo Friend Codes), a text field where users can type which games they are willing to play other users in and a drop-down list of choices where users can specify what range of money the team is willing to play for.

The Lobby

The Lobby page is the main/front page on our site that contains all of the matches available to join. Users interact with the lobby by first choosing a Game System, then Playstyle (this includes:

“All Matches” choice, which displays all Quick Matches, Team Quick Matches, Tournaments

and Team Tournaments for the chosen system (does not include Challenge Game list or Team

Challenge Game list)), and finally the match itself.

Choosing a Game System or Playstyle will filter the match table appropriately. When the Game System is chosen, the table should default to displaying All Matches of that system.

Choosing Direct Challenge or Team Challenge should generate the Game list, from A to Z, top to bottom. Each entry should contain the following:

* game name
* system (icon format)
* “Search for Users” button. Clicking this button sends users to the “Find Competitors” page.

Choosing Quick Match or Team Quick Match should generate the match list, from A to Z, top to bottom. Each entry should contain the following:

* match name
* game name
* # of entrants
* entry fee
* payout
* “Join” button.

Clicking this button generates a pop up dialog that displays the match’s rules and specifics, along with a “Join” button that will put a hold on the user’s account and place them in the match. If the match is a team variant, it will simply tally a slot for that team, awaiting other team members to fill the required slots until the team is considered in the match.

Choosing Tournament or Team Tournament should generate the match list, from earliest to

start to latest to start, top to bottom. If the number of entrants is filled before the start date of the tournament, users trying to join should receive a pop up dialog that lets them know the tournament is full. If a user leaves, the entrants should reflect the new number and users should again be able to join it. Each entry should contain the following:

* match name
* game name
* entries (will update in real time since users can join/leave at will, displayed as ‘x’ of 4, 8 or 16)
* entry fee
* payout (will update in real time since users can join/leave at will) and the “Join” button.

NOTE: Payout = 85 percent of all Match Entry Fees (15 percent is raked by the site as a service fee)

Internal Messages

A user can send a direct message to other users, but not teams. A message will show up on the inbox for the recipient and will be marked as unread until the user marks it read or views the message. Users can delete messages and respond to a message they have been sent. A history of sent messages can be seen in the user outbox. Messages consist of a subject, content, sender and receiver.

Teams

A user can belong to one team at a time of up to 10 users. Teams can compete against other teams and have their own passwords and profiles. When a user creates a team they are considered the Leader and they alone can perform actions to change the team password and kick members out. Users join teams by searching for the team name, click on the join button, and entering the proper password. Users can leave a team at any time including leaders, although leaders will be asked to name a new leader or delete the team. Other notes about teams:

* Team wins and losses are tracked on the team’s profile page
* Only some games are available for team matches (this is designated on the admin side)
* Match fees for team matches are paid by each user when they join
* Match prizes are split among team members
* Teams have their profile, but do not have an account balance
* The Team Captain may remove other teammates from the team, change the team join password and edit the team’s profile settings.
* The Team Captain can make someone else Team Captain when they wish, giving that user Team Captain privileges. Giving another user Team Captain privileges should only involve a simple drop down list, from which the Team Captain chooses a teammate and submits their decision.
* A team can only have one Team Captain at a time

Teams require a special bit of handling when they a signing up for a tournament or quick match. The core issue is that a team is not registered until a number of team members equal to the players in the challenge tournament have registered. It is best described with this example:

1. Team 1 (users are A, B and C), Team 2 (users are X, Y and Z) and Team 3 (users are L, M and N) all want to join a Team Quick Match (or Team Tournament. All Team Quick Matches are 1 team versus 1 team (or 1v1). Team Tournaments involve more teams, but the logic is the same
2. A finds a Team Quick Match to join on the match listing table, located on the site’s Lobby page.
3. A joins the match. The site places a hold on A’s account for the match entry fee
4. The site sends a notification to all users on Team 1. These notifications are placed in the users’ My Matches page (Pending tab)
5. If A wishes, they may leave the Team Quick Match from their My Matches page (Pending tab) by clicking on the Leave button on the user’s My Matches page (Pending tab)
6. If A does leave, the site reverses the hold on A’s account, and all match notifications are
7. deleted from all of Team 1’s My Matches pages (Pending tab).
8. B and C both join the Team Quick Match
9. The site places a hold on both users’ account
10. At this point, Team 1 is slotted into the match, and cannot be forced out by another team
11. The site updates the entrants field on the match listing table. However, A, B or C may leave the Team Quick Match when wish.
12. A leaves the Team Quick Match
13. The site reverses the hold on A’s account and updates the entrants field on the match listing table
14. Team 1 is no longer slotted into the match, even though B and C are still joined
15. If B and C leave, their account holds are also reversed, and the site deletes the match
16. notifications from Team 1’s My Matches pages (Pending tab)
17. Team 1 is slotted into the Team Quick Match.
18. X and Y join the Team Quick Match. The site places holds on their accounts and sends match
19. notifications to all members of Team 2, on their My Matches pages (Pending tab)
20. Team 2 is not slotted into the match until Z also joins
21. L joins the Team Quick Match because there is an open team slot still
22. Match notifications are sent to all members of Team 3 on their My Matches pages (Pending tab)
23. Z finally shows up for Team 2 and joins the Team Quick Match. Both team slots are now filled and the match is fixed
24. However, L had joined the Team Quick Match, but is now forced out because there are no more team slots available.
25. The site reverses the hold on L’s account and deletes all match notifications from Team 3’s My
26. Matches pages (Pending tab)
27. The site deducts funds from A, B, C, X, Y and Z and moves all match notifications from Pending tab on My Matches pages to Ongoing tab

Submitting Results

Once a match has been fixed and moved to the Ongoing tab on a user’s My Matches page,

that user may submit a result for that match at any time. The rules are almost identical for all types of matches, however the team result submission is a little different from individual submissions.

Results are submitted on the Match Details page. The Match Details page can be reached by

clicking on a match notification on a user’s My Matches page. Users may submit one of three match results: a win, a loss or a dispute. Once a user submits a win or loss, the result is not finalized until the opposing user submits a result as well. However, when a user submits a result, the site starts a timer, and once this timer is up, the result is finalized. This is to ensure that people don’t stall result submitting in an act of protest. Once the result is finalized, the site awards prize money to the winning user, and records win and loss statistics for each user (located on their user profiles). The site then moves the match notification from the Ongoing tab on each user’s My Matches page, to the Completed tab. Users may review match details for completed matches listed under the Completed tab, but cannot interact with them in any other way.

The third result is a dispute, which is usually filed when a user suspects another user of

cheating. When a user files a dispute, they must write out a short reason for the dispute and

confirm its submission on the Submit Dispute page. Upon confirmation, the site prevents

all users involved in the match from declaring further results for the match, and the site also adds an icon to the match notification on the Ongoing tab to alert all users in the match. The dispute is resolved on the admin side, as an admin can either refund all users’ match entry fees, or declare a match winner, and award that user the prize.

Once a dispute is resolved, the match notification entry is moved to the Completed tab on all users’ My Matches pages. Once a result is submitted, the result displays on the Match Details page for all users. When the result is finalized, this final result is also displayed for all users on the Match Details page.

This structure is identical for team matches. Any user from either team can submit a result, but only one user from each team may do so. In other words, every user is not required to

submit a result. The only exception to any of this logic is for Tournaments and Team Tournaments During Tournaments and Team Tournaments, results have to be submitted and finalized for every round of the tournament. The table that displays submitted and finalized results is removed at the start of each round, and result submission buttons are placed back in their spots. In other words, users will have to complete the result submission process multiple times throughout the course of a tournament.

The site awards prize money to the match winner (or placing users) upon result finalization.

Again, Tournaments and Team Tournaments are exceptions to this rule Tournaments and Team Tournaments award prize money to multiple winners, depending on where they place in the tournament. The amount of prize money awarded to each user (or team), is unique, so it is set manually on the admin side when creating a Tournament or Team Tournament.

There are a couple contingencies to plan for when putting together the result submitting

logic. One is both users submitting duplicate results (i.e., both declaring a win or a loss), the

other is a user failing to respond to a result submission prior to timer expiration. When two users each submit a win or a loss, the site considers the match disputed. When the second user attempts to enter a duplicate result, the site directs them to the Submit Dispute page instead, where they will file a dispute like normal and confirm its submission. At this point, the site treats the dispute like normal, adding the notification icon to the My Matches page and awaiting resolution on the admin side.

The result submitting logic must also account for a user that never responds to a result

submission. When the first user submits either a win or a loss, the site starts a 48 hour timer. If the other user does not submit a result before this timer expires, the initial result submission is finalized. If the first user declared a win, the site awards them the prize money. If the first user declared a loss, the site awards the other user the prize money.

Quick Challenge

A quick challenge is setup by an administrator for an individual to join. Here is how a quick challenge progresses:

1. Quick challenge is created and appears on the list of available challenges. It is a record in the Match table and it has a status of Open.
2. User 1 joins match: funds withdrawn in a pending transaction, match user 1 slot is created and filled with the user information, match record acceptId is set to user 1.
3. If User 1 leaves match: Pending transaction is deleted, match user 1 slot is deleted, match acceptedId value is set to null.
4. When a User 2 joins: funds withdrawn from user 2, user 1 transaction pending status is set to N, match user 2 slot is created and filled, Match status becomes fixed, users notified via email.
5. Users compete and enter results. Result is either user 1 or user 2 is winner. Result is set on match slot record. When both users have responded then winner id is set on match record and winner is paid. Match record status set to completed.
6. If users disagree on winner match record status is set to disputed and an administrator will be able to review the match and set a winner to trigger the actions noted in step 5.
7. Administrators can cancel a match which will set the match record to cancelled status and trigger a refund to joined users (if any exist).
8. If a Quick Challenge is recurring then a new Quick Challenge is created and the cycle starts at step 1.

Team Quick Challenge

A team quick challenge is setup by an administrator for an individual to join. Here is how a team quick challenge progresses:

1. Quick challenge is created and appears on the list of available challenges. It is a record in the Match table and it has a status of Open. The match team size value must be a value from 2 to 10.
2. Team 1 User 1 joins match: funds withdrawn in a pending transaction, match user 1 slot is created and filled with the user information, match record acceptId is set to user 1. Additional match slots are created with the User 1 team id set so that total slots created for the team is equal to the match team size value. Teammates are notified that a team quick challenge is available.
3. User 1 teammates can join until all team slots are filled. Funds are withdrawn in pending transaction and an empty match slot is filled.
4. Users can leave at any time until match is fixed. Leaving removes the related pending transaction and sets the match slot to null for the leaving user.
5. If all users of a team leave match: all of the match user slots for the team are removed, match acceptedId value is set to null. Team is notified that they have left the challenge. If a second team has joined they are also notified.
6. When user from a second teams joins: funds withdrawn in a pending transaction, match user 2 slot is created and filled with the user information. Additional match slots are created with the User 2 team id set so that total slots created for the team is equal to the match team size value. Teammates and members of team 1 are notified that a team quick challenge is available.
7. Team 2 users can join and leave as per steps 3 and 4.
8. When all slots are filled for both teams: All pending transactions for the match are set to not pending. Match status becomes fixed, users notified via email.
9. Users compete and enter results. Result is either team 1 or team 2 is winner. Result is set on match slot record. When both teams have provided at least one response then winner id is set on match record and winning team participants are paid (winnings distributed evenly among them). Match record status set to completed. When a user from a teams provides a match result it sets that same value for all teammates so there cannot be disagreement among team members.
10. If teams disagree on winner match record status is set to disputed and an administrator will be able to review the match and set a winner to trigger the actions noted in step 9.
11. Administrators can cancel a match which will set the match record to cancelled status and trigger a refund to joined users (if any exist).
12. If a Team Quick Challenge is recurring then a new Team Quick Challenge is created and the cycle starts at step 1.

Challenges

A single member can challenge another member to a game. A challenge is made by selecting the game, entering a subject line, providing a date and stake amount, and then adding any comments or match details to be shared. Once the challenge is made the other member can accept or decline the challenge. The life of the challenge follows this flow:

1. Challenge is created and appears on the list of challenges for both users. It is a record in the Match table and it has a status of Open. The challenger has funds removed in a pending transaction. Challenged user is sent a notification.
2. If User 2 declines (or fails to respond within 48 hours) the match is cancelled and the pending transaction is deleted. Challenger is sent a notification.
3. When a User 2 accepts: funds withdrawn from user 2, user 1 transaction pending status is set to N, match slots are created for the two users, Match status becomes fixed, users notified via email.
4. Users compete and enter results. Result is either user 1 or user 2 is winner. Result is set on match slot record. When both users have responded then winner id is set on match record and winner is paid. Match record status set to completed.
5. If users disagree on winner match record status is set to disputed and an administrator will be able to review the match and set a winner to trigger the actions noted in step 5.
6. Administrators can cancel a match which will set the match record to cancelled status and trigger a refund to joined users (if any exist).

Team Challenges

A team can challenge another team to a game. A challenge is made by selecting the game, entering a subject line, providing a date and stake amount, and then adding any comments or match details to be shared. Once the challenge is made the other team can accept or decline the challenge. The life of the team challenge follows this flow:

1. Challenge is created and appears on the list of challenges for both teams. It is a record in the Match table and it has a status of Open. The challenger has funds removed in a pending transaction. Match slots are created for both teams up to the team size set in the challenge.
2. If a user from team 2 declines (or there is no response in 48 hours), the match is cancelled and the pending transaction is deleted. Challenging team is notified.
3. When a User from team 2 accepts: a pending transaction fee is created for the user, a slot is filled , and users from both teams are notified via email.
4. Users from both teams join until all slots are full.
5. Users can leave at any time before match is fixed. When they leave their pending transaction is deleted, all users that have joined are notified, and the slot information for the departing user is reset to null. When a last member from a team leaves the match is deleted and all related pending transactions are deleted. Members of both teams are notified.
6. When all slots are filled the match becomes fixed, all participants are notified, and all related pending transactions are set to not pending.
7. Teams compete and enter results. Result is either team 1 or team 2 is winner. Result is set on match slot record. When both teams have responded then winner id is set on match record and winning team is paid (equal amounts to all participants). Match record status set to completed.
8. If users disagree on winner match record status is set to disputed and an administrator will be able to review the match and set a winner to trigger the actions noted in step 5.
9. Administrators can cancel a match which will set the match record to cancelled status and trigger a refund to joined users (if any exist).

Tournaments

Tournaments are setup by the site admin for members. Members can see the list of available tournaments and join one by clicking the join link. A tournament has a system, fee, game, format, rules, and number of participants. Members can join until the number of participants are reached or the tournament is scheduled to start and at that point the tournament will be fixed and they can start playing the tournament games. Tournaments follow this flow:

1. User joins tournament: funds withdrawn in a pending transaction. Tournament slot is created for the user.
2. User leaves (only available until tournament is fixed): Pending transaction deleted, user removed from tournament user slot
3. All user slots filled: Tournament is fixed, seeded and brackets built, first round matches are built, match slots are filled for users, and activated. All users that have joined are notified.
4. OR Timer runs out: Tournament is fixed, seeded, bye rounds determined and brackets built, first round matches are built, match slots are filled for users, and activated. All users that have joined are notified. Bye rounds are treated as a match that the user wins, but a “bye” opponent is entered as the loser.
5. Once all matches for a round are completed the winners are used to build the next round, their maxRound counter on the tournament slot is incremented. Loser tournament slots are set to not active. The next round matches are created and slots are filled with the active members of the tournament (after seeding if necessary).
6. Once there is only one active user left they are a winner and get the winner pot amount for position 1. If the pot has additional payouts then it pays out by moving backwards from the current round number and paying members that made it to that maxRound.

Team Tournaments

Team Tournaments are setup by the site admin for teams. Members can see the list of available tournaments and join one by clicking the join link. A team tournament has a system, fee, game, format, rules, number of team members, and number of participating teams. Teams can join until the number of participating teams are reached or the tournament is scheduled to start and at that point the tournament will be fixed and they can start playing the tournament games. Team Tournaments follow this flow:

1. User joins tournament: funds withdrawn in a pending transaction. Tournament slots are created for the user team to the number of participants.
2. User leaves (only available until tournament is fixed): Pending transaction deleted, user removed from tournament user slot. If all slots are empty for a team then the team slots are deleted.
3. All Team slots filled: Only users that are members of a team with an open slot can join. Other users will no longer see the Team Tournament on their available list.
4. All user slots for all teams filled: Tournament is fixed, seeded and brackets built, first round matches are built, match slots are filled for teams, and activated. All users that have joined are notified.
5. OR Timer runs out: Tournament is fixed, seeded, bye rounds determined and brackets built, first round matches are built, match slots are filled for users, and activated. Users that have joined, but their team slots are not full will be removed and notified. All teams that have joined (and filled all slots) are notified. Bye rounds are treated as a match that the team wins, but a “bye” opponent is entered as the loser.
6. Once all matches for a round are completed the winners are used to build the next round, their maxRound counter on the tournament slot is incremented. Loser tournament slots are set to not active. The next round matches are created and slots are filled with the active teams of the tournament (after seeding if necessary).
7. Once there is only one active team left they are a winner and get the winner pot amount for position 1 distributed among the team’s participants. If the pot has additional payouts then it pays out by moving backwards from the current round number and paying teams that made it to that maxRound distributed evenly among participating members.

Tournaments Brackets

Tournaments and Team Tournaments each consist of multiple matches, played one round at

a time through the site’s bracketing system. This means that the site has to build a bracket

when a Tournament or Team Tournament is fixed. It also means that the site has to update

the bracket as matches are played and users move into deeper rounds of the tournament.

Tournaments pay out multiple users, so users that do not make it to the final round may still

receive prize money.

The primary challenge when putting together the bracket logic is that the site must be

able to make a bracket that makes sense, no matter how many users have joined the

Tournament or Team Tournament. Unlike Challenges and Quick Matches, Tournaments

and Team Tournaments are not fixed when the match is full of entrants. Instead, the

tournament starts at a fixed time and date (which we establish on the admin side upon

tournament creation), as this allows users to set aside the necessary time to complete

the tournament. With a fixed time and date, a tournament may involve any number of users,

and everyone who joins will expect to play at that time and date.

This is accomplished by setting up first round byes when the number of users in the

tournament is something other than a power of two.

No matter how many entrants are in the tournament, it is possible to make it work with

enough first round byes. Rule of thumb is - there are no byes when the number of entrants

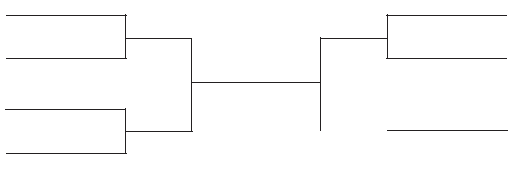
is equal to a power of 2 (8, 16, 32, 64, etc.). To calculate the number of byes for any other

number, take the number of actual entrants, and add byes until reaching the next power of 2.

For example:

A tournament is organized for 16 entrants, but only 7 join. The next power of 2 is 8, so the

bracket would be organized with a single bye, and then proceed as if it was the second round

of an 8 user tournament. This is what the bracket would look like.

Another example:

Consider the same 16 entrant tournament, except this time 9 users join. The next power of 2 is 16, so add 7 byes and then play out the remaining rounds like normal. The bracket would look like this:

The formula for determining the number of first round byes, then, is thus:

byes = next highest power of 2 (relative to the number of entrants) - number of entrants

All tournaments are single elimination and are randomly seeded, so there is no added

complexity to building the bracket. The only judgment the site has to make is the number of

first round byes, and built the bracket around that value.

Once the bracket is set, users are required to play their matches and submit results every round. Once the result for a match is finalized, the winning user is pushed to the next round on the bracket and the Match Details page for their current page allows for match result submission again. Like Challenges and Quick Matches, when a user submits a result for a tournament match, the site starts a 48 hour timer. At the end of that timer, the site finalizes the result if the opponent did not dispute the result. If they do, the dispute will be resolved on the admin side.

Users may progress through the bracket at their own pace (there is no set time for starting

each round). When a user is matched up with their next round opponent, the Match Details

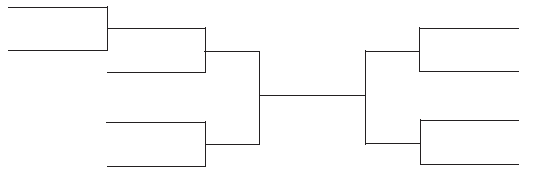
page updates to reflect the new opponent and their information. The full bracket is displayed

at the bottom of the My Matches page so that users can track their progress and other users’

progress.

At the conclusion of the tournament, the site awards a fixed percentage of the prize to each

placing user. This is unique to tournaments as well, as the number of entrants will determine

prize amounts - which will vary from tournament to tournament.

Tournament Payouts

At launch, the site will host tournaments up to 16 entrants in size. However, because

Tournaments and Team Tournaments are fixed at a specified time and date, the site has to be

prepared to alter the payout table depending on how many users are involved. These payout

tables specify the percentage of the pot each placing user in the match receives.

For 2 users

1st place: 100 percent

For 3 users

1st place: 100 percent

For 4 users

1st place: 100 percent

For 5 users

1st place: 70 percent

2nd place: 30 percent

For 6 users

1st place: 70 percent

2nd place: 30 percent

For 7 users

1st place: 70 percent

2nd place: 30 percent

For 8 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

For 9 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

For 10 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

For 11 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

For 12 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

For 13 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

For 16 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

For 14 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

For 15 users

1st place: 50 percent

2nd place: 30 percent

3rd place: 10 percent

4th place: 10 percent

Cashier Page

Users click on the Cashier button in the header to get to the Cashier page. The Cashier page

has three navigable tabs: Deposit, Withdraw and Transaction History.

The default tab upon landing on the Cashier page is Deposit. There are two fields on this

page -- a “Deposit Amount” text area where users can type in how much money they want to

deposit in the site (minimum $10) and a “Payment Method” radio choice -- Paypal or Credit

Card. Entering an amount, choosing PayPal and pressing the “Continue” button will send users to the PayPal site where users can finalize payment via our PayPal merchant account. PayPal will direct users back to the lobby with their new funds after completing the process. Entering an amount and choosing Credit Card will generate the following four additional fields to be filled out by the user:

* Credit Card Type (VISA, MasterCard, American Express and Discover)
* Credit Card Number
* Security Code (cvv)
* Expiration Date (month/year XX/XXXX).

After entering an amount, choosing credit card and pressing “Continue” will generate a pop up dialog that contains a Confirm Payment button. Pressing Confirm Payment will charge the

user’s credit card, add funds to the user’s account and send them to the lobby page. All users

depositing money should receive an email detailing the amount and specifics.

The Withdraw tab contains the two following fields that are to be filled out by the user:

withdrawal amount (a $3 fee is subtracted from the account for Paypal withdrawals and a $5

fee for Check withdrawals) -- withdrawal method (radio choice for PayPal or Check). A check

box for accepting terms, which users must accept before the site will permit a withdrawal.

Choosing “PayPal” will create the following additional field -- PayPal Email Address. After filling out the form and pressing “Continue” the site will generate a pop up dialog that contains a Confirm Withdrawal button. Pressing Confirm Withdrawal will subtract the fee from the user’s account and then send an email to cashier@gamegoon.com with the withdrawal request

information that the user just filled out. We will handle withdrawals manually.

The Transaction History tab contains a table that displays the user’s deposit and withdrawal

history, including the dates of the transaction, whether it was a deposit or withdrawal, the

amount and the method of payment or deposit (keeping the user’s credit card information

appropriately concealed).

Match Details Page

When a match is fixed, the site generates a Match Details page that can be accessed through

the user’s My Matches page (Ongoing tab). To get to the Match Details page from the My

Matches page, the user clicks on the appropriate match notification entry under their Ongoing tab. Match notifications do not link to Match Details pages when they are in under the Pending tab and not fixed.

The Match Details page consists of several elements. These elements include:

* A unique, alphanumeric string that represents the match ID (this is used for the site’s anticheat software)
* Each user’s image avatar, username and win-loss record
* The prize money pool
* The match start time and date (for Challenges and Quick Matches, this will be the time and date the match is fixed. For Tournaments, it will be set on the admin side)
* Each user’s contact information (Steam ID, XBL Gamertag, PSN ID and Nintendo Friend Code)
* The submit win, submit loss and submit dispute buttons

When a result is submitted, a notification is added to the Match Details page that lists the

submitted result, and the user who submitted it. When a user submits a result, their submit

result button are replaced by this notification. When the second user submits a result,

this notification is also added to the Match Details page. When a winner is finalized, the

Match Details page replaces the notifications with a final results message, announcing the

winner of the match

A match rules text field, which is input from the admin side For Tournaments and Team Tournaments, a tournament bracket is also listed. This bracket will need to be updated for users in the tournament after matches in the tournament are completed

When a match is finalized, the notification is moved from the Ongoing tab to the Completed

tab on the My Matches page. It can still be clicked to access the Match Details page.

Administration Side

The admin side serves four primary functions:

* Adding and deleting matches/games for all six playstyles
* Resolving disputes
* Viewing matches in progress and interfacing with them
* Sending out announcements to every users’ message inbox

We are looking for the most minimal UI possible to permit these functions.

Adding and deleting matches/games for all six play styles

An admin will press the Create Match button to generate a new Quick Match, Team Quick Match, Tournament or Team Tournament. This will take the admin to a Create Match page that contains a simple form and submit button. This form includes:

* Playstyle (Quick Match, Team Quick Match, Tournament, Team Tournament)
* Match name
* System (PC, XBox One, PS4, WiiU)
* Game
* Number of entrants (only for Tournaments and Team Tournaments)
* How many team members on each team (for example, 3v3)
* Match entry fee
* Prize
* Date and time when match is fixed (only for Tournaments and Team Tournaments)
* Number of places paid
* Text field for special rules
* A pair of radio buttons that either enable Quick Match replication upon fixing, or disable it

NOTE: Quick Matches and Team Quick Matches are meant to be a rapid fire way for users

to compete, so they need to be automatically created again as they fill. When this option

is selected, when the Quick Match is fixed, an exact copy of it is created and placed on the

match listing table. This way, there is always at least one open Quick Match of the specified

type.

When the form is complete, the site will ask the admin to confirm the specifics. When confirmed, the site will place the new match in the appropriate section of the match listing table.

An admin will press the Add Game button to add a new game option to the Challenge and Team Challenge list. Upon pressing the button, the admin is taken to the Add Game page, where the admin completes a simple form. This form includes:

* A text field where the admin adds the name of the game
* System (PC, Xbox One, PS4, WiiU)

When the form is complete, the site will ask the admin to confirm the specifics. When confirmed, the site will place the new game in the appropriate section of the match listing table.

Resolving disputes

When a user submits a dispute through the Match Details page, it should create a notification on the admin side. Clicking on the Match Disputes button sends the admin to a page that contains a table that displays all the disputes submitted by users. Each dispute entry can be expanded to show the dispute submission details (the reason the user submitted the dispute (which is entered on the Submit Dispute page), the date and time of the dispute and the usernames of each user involved in the dispute. There should be a way to select either user (with a checkbox or radio button).

Each entry comes with three buttons:

* Force a winner (award prize money to the selected (The other two buttons don’t require a user to be selected to function)
* Refund both users, minus service fee (the 15 percent that is taken out of Match Entry fees and kept by the site)
* Refund both users, and their service fees (in other words, a total refund)

Once the admin selects one of the three buttons, a dialogue box will pop up to confirm the selection. If confirmed, the notification is removed from the table and logged in a text file that is stored online.

Viewing matches in progress and interfacing with them

The Matches page should contain a paginated table with all of the current matches on the site in progress. The entries should include the match name, match ID, the date it started, number of players and a button to View Match. Within each match, the page should display the two users or teams that are currently in a match with one another. We should have the option to click on either user, then choose Winner or Loser, to force the match declarations. This is to account for users who are idle for an extended period of time. If the match is a tournament or team tournament, the page should display the bracket. We should be able to click on any user in the bracket and choose Winner or Loser to force the declaration in that matchup and push the bracket forward.

Sending messages from one user to another

The Send Message page should consist of a simple text form and a submission button. We

should be able to type a message in the text area and then submit, sending the message to

all users on the site. This message should appear in the user’s inbox page.

In all, these are the buttons that should be available from the top level of the admin site

* Add Game
* Create Match
* Resolve Dispute
* Check Matches in Progress
* Send Message to Users

**Process Flows**

In order to help clarify the application description this section provides flow diagrams and notes for most of the site functions.

