

Business Requirement Documents

CECS 491

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Date: April 30, 2020

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Revisions Summary (04/30/20)

Features

Since the last submission of our Business Requirements Document, the following features have been removed:

4.1.3 Account Recovery

- User forgot their password and is unable to login and requests to reset their password

4.3.6 Profile Customization

- User can edit certain aspects of their profile:
 - GamerTag
 - Name: first and last
 - Bio minimum 1 to a maximum of 700 characters (utf-8)

4.4.3 Manage Tournament Bracket

- Input Competitor score
- Adding / removing / replacing a Competitor
- Disqualify Competitors (must provide reason(s))

Other Changes

The four-digit GamerTagID that would be associated to every user has also been removed. This would have allowed various users to have duplicate GamerTags but have unique GamerTagIDs

The GamerTag is now considered unique to every user. Thus searching for one can't be filtered.

1. PROJECT SUMMARY

1.1 Purpose

The purpose of this document is to provide information about the business requirements used in the **Kraken Bracket** project

1.2 Background Information

- When it comes to managing large-scale video game tournaments, it is likely that there will be confusion among staff and competitors
- Other video game tournament apps on the market do not provide real-time updates once the information is inputted into the system. This will cause delays and inconveniences for those who are keeping track of updates regarding tournament matches, competitors, etc.
- The **Kraken Bracket** project will provide solutions to these problems. The most important aspect of the project is to provide all users with real-time information on events, tournaments, and other aspects of the app.

2. PROJECT OBJECTIVE

We are projecting that this application can potentially be a major platform for a competitive gaming audience. This application is targeted to suit the needs of tournament organization for tournament hosts, competitors, and spectators of tournaments large or small. With the potential traction this product gains, it can also become a social platform similar to Twitch and Discord such that the product is also a platform to reach the gaming audience in terms of product advertisement potential sponsors as well.

3. PROJECT SCOPE

3.1 Audience

Our application is targeting specifically competitive video game players who seek a solution to organize tournament brackets whether the tournament is large or small, as well as regular users who are interested in knowing tournament information. We intend our application to be the go-to application for all tournaments.

The application will initially be launched for audiences in California. After launch, the application will be accessed by users within the continental United States plus Alaska and Hawaii.

3.2 Type Of Application

Initially, the application will support the latest versions of Google Chrome and Mozilla Firefox browsers for the web application. Minimum 10 mbps internet connection

The intended target is to have the application supported on the latest versions of iOS and Android. It will support 4G cellular connection and above.

3.3 Data To Be Collected

The following tentative data will be collected for usage statistics:

- User account information
 - Birthday (YYYY/MM/DD)
 - Location (city and state)
- Tournament Brackets and Events
 - Location
 - Games played
 - Gaming Platform
 - Date / time (local time of the event)

4. FEATURES

This section outlines functional and non-functional features for all users. Each feature varies depending on the user role.

4.1 Account

4.1.1 Account Registration

- User create an account to access features exclusive to registered users
- Required Account information to be inputted
 - Email
 - Email format
 - Maximum of 200 characters
 - Password
 - Minimum of 12 to a maximum of 2000 characters
 - At least one of the following characters:
 - Upper or Lowercase alphabet letter
 - Number (0-9)
 - Special character (UTF-8)
 - First Name, Last Name
 - Minimum of 2 to a Maximum of 20 characters (letters only) for each of the names
 - GamerTag
 - GamerTag minimum of 2 to a maximum of 20 characters, must be unique (UTF-8)

Preconditions

- Must not be logged in with another account
- Must be at Account Registration view

Postconditions

- User account is created
- Display user-friendly message indicating account is created
- Redirected to the homepage
- Account creation selection / Log in selection is removed and replaced with GamerTag and log out selection

Failure Postconditions

- Unable to create account
- Unable to be redirected to homepage
- Log in / Account creation selection is still visible and not replaced

Non-functional

- Account will be created and stored within 1000 ms
- User is automatically login after creation

4.1.2 Account Management

- Allow user to manage their account, such as edit / update account information
 - Change first name
 - Change last name
 - Change password
 - Enable / Disable account

Preconditions

- User must be registered and logged in
- Must be in Account Management view
- User must input their current password and their new password in order to change the password

Postconditions

- User account is updated
- Display user-friendly message indicating what was updated

Failure Postconditions

- Unable to update Account due to one or more of the following conditions:
 - Invalid first or last name
 - Invalid password

Non-functional

- Account will be updated and stored within 1000 ms
- Password needs to meet the minimum requirements
 - Minimum of 12 to a maximum of 2000 characters
 - At least one of the following characters:

- Upper and lowercase
- Number (0-9)
- Special character (UTF-8)

4.2 User (Registered and Non-Registered)

* Features 4.2.1 - 4.2.3 will be separated by a selector determining the keyword, but use the same component and view.

4.2.1 Search For Tournament Brackets

- Search for Tournament Bracket
- Search criteria
 - Keyword: Bracket
 - Must have a minimum of 1 character keyword

Preconditions

- User does not need to be logged in to search
- Must be at search view

Postconditions

- Displaying results
 - 10 results per view
 - 10+ results will be displayed in multiple of 10
 - Can be less than 10
 - Can be filtered (by date, number of competitors, game)
- Result displaying
 - Tournament Bracket name
 - Host name
 - Video game being played
 - Number of Competitors
 - Start Date and End date

Failure Postconditions

- Result is not displaying properly

Non-functional

- Result is fetched and displayed within 1000 ms
- Sort is accurate
 - Most keyword match to least

4.2.2 Search For Event

- Search for Event
- Search criteria
 - Keyword: Event
 - Must have a minimum of 1 character keyword

Preconditions

- User does not need to be logged in to search
- Must be at search view

Postconditions

- Displaying results
 - 10 results per view
 - 10+ results will be displayed in multiple of 10
 - Can be less than 10
 - Can be filtered (by date, number of competitors, location, number of brackets)
- Result displaying
 - Event name
 - Host name
 - Location
 - Start and End date
 - Number of Tournament Brackets

Failure Postconditions

- Result is not displaying properly

Non-functional

- Result is fetched and displayed within 1000 ms
- Sort is accurate
 - Most keyword match to least

4.2.3 Search For Gamer

- Search for Gamer
- Search criteria
 - Keyword: Gamer
 - Must have a minimum of 1 character keyword

Preconditions

- User does not need to be logged in to search
- Must be at search view

Postconditions

- Displaying results
 - 10 results per view
 - 10+ results will be displayed in multiple of 10
 - Can be less than 10
- Result displaying
 - GamerTag

Failure Postconditions

- Result is not displaying properly

Non-functional

- Results are fetched and displayed within 1000 ms
- Sort is accurate
 - Most keyword matched to least

4.2.4 Event Home View / Dashboard

- Event Dashboard displays concise information about each Event
- The following must be displayed for all Events:
 - All brackets in the tournament. Each bracket will display the number of entrants & Start / End dates
 - Tournament Rules
- The following must and will only display under certain conditions:
 - Competitors - sorted by alphabetical order from their GamerTag. If no Competitors are available, then this section will not appear
 - Video game(s) being played (if information is provided)
 - Start and End date of Event

Preconditions

- User does not need to be logged in to view dashboard
- Event must exist
- User must click on Event's home page in order to view

Postconditions

- Information mentioned above is fetched and displayed to the User

Failure Post Conditions

- At least one of the required information mentioned does not display
- At least one of the certain-conditions information is available and does not display

Non-Functional

- All information must be retrieved and displayed to the User within 5000 ms
- The displayed information is accurate according to the Event

4.2.5 Tournament Bracket Home View / Dashboard

- Display Tournament Bracket information
 - Bracket name
 - Start and End date
 - Number of competitors
 - Gaming platform
 - Game played
 - Bracket rules
 - Standings
- While Tournament Bracket is active display the current Bracket, along with its Competitors
- After Tournament Bracket is completed display Winner and / or top seated Competitors

Preconditions

- User does not need to be logged in to view dashboard
- Tournament Bracket must exist
- User must on Tournament Bracket Home View / Dashboard

Postconditions

- Information mentioned above is fetched and displayed to the User

Failure Post Conditions

- At least one of the required information mentioned does not display
- Wrong information is displayed

Non-Functional

- All information must be retrieved and displayed to the User within 5000 ms
- The displayed information is accurate according to the Tournament Bracket

4.3 Registered User

4.3.1 Create Tournament Bracket

- User create Tournament Bracket
 - Bracket Name Minimum 5 to a maximum of 75 characters (utf-8)
 - Can not contain emojis
 - Only bracket type available is Single Elimination
 - Maximum number of competitors for a single tournament bracket is 128 users
- Additional optional information to include
 - Video game being played, Maximum of 50 characters
 - Gaming platform, Maximum of 50 characters
 - Rulesets, Maximum of 700 characters
 - Start Date, End Date (YYYY/MM/DD)
 - Start date by default is when first match starts
 - End date by default is when a winner is decided

Preconditions

- User must be logged in
- User must be at Tournament Bracket Creation View

Postconditions

- The Tournament Bracket is created and able to be viewed
- Bracket displays the correct information after being created
- Registered Users is able to register to the Bracket

Failure Postconditions

- Incorrect Host user, allowing another User to edit
- Bracket is unviewable
- Users can not register to the Bracket

Non-Functional

- Bracket will be created and viewable within 1000 ms

4.3.2 Create Event

- User creates an event and becomes host for the event
 - Event name minimum 5 to a maximum of 75 characters (utf-8)

- Cannot contain emojis
 - User can create multiple tournament brackets within an event minimum 1 to a maximum of 10 tournament brackets
- Optional information
 - Valid location address
 - Start Date, End Date (YYYY/MM/DD)
 - Default Start Date is when the first match start
 - Default End Date is when all Tournament Brackets have been concluded
 - Event descriptions
 - Minimum 5 to a maximum of 700 characters
 - Can include emojis and special characters (utf-8)
 - Create Tournament Bracket now or later

Preconditions

- User must be logged in
- User must be at Event Creation view

Postconditions

- The event is created
- The User who created the Event becomes the Host of the event
- The Tournament Brackets are created within the Event
- Registered users are able to sign up for the Event and the Tournament Brackets they want to participate in

Failure Postconditions

- Incorrect Host user, allowing another User to edit the event information
- Event is unviewable
- Brackets in the event are unviewable
- User cannot register for the Event or Tournament Brackets within the event

Non-functional

- Event will be created within 1000 ms

4.3.3 Register For Tournament Brackets And Events

- Registered User select register to Tournament Bracket or Event
- Users need to provide their email and GamerTag
- Confirm registration

Preconditions

- Users must be logged in
- Must be under Event or Tournament Bracket view

Postconditions

- User is successful in registering for Event and/or Tournament Brackets
- Automatically follow the Event and/or Tournament Bracket

Failure Postconditions

- User is unsuccessful when registering for an Event or Tournament Bracket

Non-Functional

- Registering process will be completed within 1000 ms

4.3.4 Unregister from Tournament Bracket

- User decide to not participate in the Tournament Bracket
- User select unregister Tournament Bracket
- Unregister before Tournament Bracket start date
 - User will be indicted that unregistration was a success
- Unregister during in progress Tournament Bracket before User's first Match
 - User will not receive a loss, but will be indicated as opt-out
 - Opponent will receive a buy round
- Unregister after User already participate in any Match
 - User will received a loss for their upcoming Match
 - User will be indicated as forfeit
 - Opponent will receive a automatic win
- Unregister after Tournament Bracket end date
 - This action can not be performed
 - No changes can be made to Tournament Bracket after end date

Preconditions

- Users must be logged in
- Must be at Tournament Bracket view
- Users must be already registered in the Tournament Bracket

Postconditions

- User is successful in unregistering from the Tournament Bracket

Failure Postconditions

- User is unsuccessful in unregistering from the Tournament Bracket
- User is still registered in Tournament Bracket

Non-functional

- Unregistering process will be completed within 1000 ms
- Tournament Bracket will automatically be updated

4.3.5 Unregister Event

- User select unregister Event
- Unregister before Event start date
 - User will be indicted that unregistration was a success
- Unregister during in progress Event
 - User will be indicted that unregistration was a success
- Unregister after Event end date
 - This action can not be performed

Preconditions

- Users must be logged in
- Must be at Event view
- Users must be already registered the Event

Postconditions

- User is successful in unregistering from the Event

Failure Postconditions

- User is unsuccessful in unregistering from the Event

Non-functional

- Unregistering process will be completed within 1000 ms

4.4 Host

4.4.1 Update Event Information

- Change required Event information - must only be allowed to do so before the event starts
 - Start and end time - both values must not be less than the current date's value, i.e. dates must be in a future time
- Change optional Event information
 - Event descriptions
 - Minimum 5 to a maximum of 700 characters
 - Can include emojis and special characters (utf-8)

Preconditions

- User must be logged in and be a Host of the Event
- Must be at Update Event view

Postcondition

- Host is able to save any changes made to an event
 - This includes any changes made to Tournament Brackets that is in an event
- Users associated with the Event will be notified

Failure Postconditions

- Host is unsuccessful in saving changes made to an event

Non-Functional

- Changes will be updated within 1000 ms

4.4.2 Update Tournament Bracket Information

- Change required Tournament Bracket information
 - Maximum number of competitors (maximum of 128 Users)
 - Input registration end date (YYYY/MM/DD)
 - Registration end date has to be after current creation date
- Change optional Tournament Bracket information
 - The associated Event if there is any
 - Video game being played

- Rule-set the game is being played on
- The platform the game is being played on
- Start / End date (YYYY/MM/DD)

Preconditions

- User must be logged in and be the Host of the Tournament Bracket or Event that the Tournament Bracket is under
- Must be at Tournament Bracket view

Postconditions

- Host is successful in saving any changes made in the tournament bracket

Failure Postconditions

- Host is unsuccessful in saving any changes made in the Tournament Bracket
- The new Start / End date is conflicting with the old Start / End date

Non-Functional

- Changes will be updated within 1000 ms

4.4.3 Delete / Cancel Tournament Bracket

- Host want to remove Tournament Bracket
- Before Tournament Bracket start date
 - Host can remove Tournament Bracket
- In Progress Tournament Bracket
 - Progress will still be recorded and available for viewing
 - Must state reason for stopping Tournament
- After Tournament Bracket end date
 - This action can not be done
 - Tournament Bracket is archived

Preconditions

- User must be logged in
- User must be the Host for the Tournament Bracket if they want to delete Tournament Bracket
- Tournament Bracket deletion must be perform before the start date
- For in progress Tournament Bracket, this action will end Tournament Bracket and must provide reason(s)

Postconditions

- Host is successful in deleting the Tournament Bracket
- In progress Tournament Bracket will end

Failure Postconditions

- Host is unsuccessful when deleting the Tournament Bracket
- The Tournament Bracket is still accessible by Users
- Users is still able to make update to Tournament Bracket, when in progress Tournament Bracket ends

Non-functional

- Deletion will be completed within 1000 ms
- All Users currently in view will be redirected to a different page

4.4.4 Delete / Cancel Event

- Host wants to remove Event
- Before Event start date
 - Host can remove Event
- In Progress Event
 - Progress will still be recorded and available for viewing
 - Must state reason for stopping Event
- After Event end date
 - This action can not be done
 - Event is archived

Preconditions

- User must be logged in
- User must be the Host for the Event if they want to delete Event
- Event deletion must be perform before the start date
- For in progress Event, this action will end the Event and must provide reason(s)

Postconditions

- Host is successful in deleting the Event
- In progress Event will end

Failure Postconditions

- Host is unsuccessful when deleting the Event
- The Event is still accessible by Users
- Host is still able to make update to Event, when in progress Event ends

Non-functional

- Deletion will be completed within 1000 ms
- All Users currently in view will be redirected to a different page