ARENA Class Diagram

<<interface>>
ARENA

-websockets: wbs
-authentication: HTTPS

Advertisements
-advertisements: String
-date_time: Long

-advertisements(): String
-setDateTime(): Long
-getDateTime(): void

Organizers
-players: ArrayList
-tournaments: ArrayList
-spectators: ArrayList

-createPlayers(): ArrayList
-createTournaments(): ArrayList
-createSpectators(): ArrayList

Annoucements
-annoucement: String
-date_time: String

-accounce(): String
-setDateTime(): Long
-getDateTime(): void

Sponsors
-username: String
-pass: String

-setUserName(): String
-getUserName(): void
-setPassword(): String
-getPassword(): void

TournamentStyles
-tournament: int

+getTournament(): void
-setTournament(): int

Players
-playerUsername: String
-playerPassword: String

+getPlayerUsername(): void
+getPlayerPassword(): void
-setPlayerUsername(): String
-setPlayerPassword(): String

Spectators
-spectatorLogin: String

-login(): String

Matches
-matches: ArrayList

+getMatches(): void
-setMatches(): ArrayList

Ranking
-ranking: int

+getRanking(): void
-setRanking(): int

ARENA Use-Case Diagram

ARENA Game

- Tournaments
- Rankings
- Matches
- Announcements
- Advertisements

<<includes>>
<<includes>>
<<extends>>
<<extends>>

Actors: Organizers, Players, Sponsors, Spectators, Web Server

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Activity Diagram

Pool lanes: Organizer, Player, Advertisers

- User Registration
- Organizer
- Upload Connect4 Game
- Annoucement
- Organize Tournament
- Advertiser Solicitation
- Accepts Applications
- Results
- Player
- Game Play
- Announcements
- Tournament Ends
- Banners

State Diagram

- Check Player
  - Do: If Player 1 = False, Player 2, else Player 1

- Player 1 Start
- Player 2 Start

- Player 1
  - Do: Place chip into slot
- Player 2
  - Do: Place chip into slot

- Diagonal
  - Do: Check for diagonal chips
- Horizontal
  - do: Check for horizontal chips
- Vertical
  - Do: Check for vertical chips

- Four in a Row

- Player Wins
  - Game Ends

Labels: Diagonal, Horizontal, Vertical, No, Yes, check