Planning step 1

Requirements

1. Track games played and their outcome (who won)
2. Multiple competitors play in the tournament
3. Creates a tournament plan (who plays in what order)
4. Schedules games
5. A single loss eliminates a player
6. The last player standing is the winner

Ok… we have an idea what we are doing.. now we need to go into details

Questions:

1. How may players will the tournaments handle? Is it variable?
2. If a tournament has less that the full complement of players, how do we handle this?
3. Should the ordering of who plays who be random or ordered by input order?
4. Should we schedule the game or are they just played whenever?
5. If the games are scheduled, how does the system know when to schedule games for?
6. If the games are played whenever, can a game for the second round be played before the first round is complete?
7. Does the system need to store a score of some kind or just who won and lost?
8. What type of front end should this system have(form, app, ect…)
9. Where will the data be stored?
10. Will this system handle entry fees, prizes or other payout? What does that look like
11. What type of reporting is needed? (score card? Name won…. )
12. Who can fill in the results of the game?
13. Are there varying levels of access?
14. Should his system contact users about upcoming games?
15. Single use or team use for tracker

Overview planning

We need to go over our questions with client or stakeholder

Answers:

1. The application should be able to handle a variable number of players
2. A tournament with less than perfect comp should add in byes… basically random select a player to move on as if they won a round
3. The ordering should be random
4. The games should be played in whatever order
5. They are not scheduled so we don’t care
6. No, each round should be fully completed before the next round
7. Storing a simple score would be nice. Just a number for each player
8. Should be a windows desktop system for now… but want app or website
9. Data should be stored in SQL, but please add option to store text file
10. Yes, option for charging entry fee.. prizes should be option where admin choses how much money to award a variable number of places. Total cash amount should not exceed the income from a tournament % bases system would be nice to specify
11. Simple report specifying the outcome of the games per round, report who won and how. Can be emailed or displayed on a form to competitors and admin
12. Anyone using the application should be able to fill in the game scores. (so no passwords or admin necessary).
13. NO. the only method of varied access is if the competitors are not allowed into the app, and instead the do everything via email.
14. Yes, email users that are due to play as well as who is scheduled to play. (auto… generic text probably)
15. The tracker should be able to handle the addition of other members. All members should be treated as equals in that they all get tournament emails. Teams can rename their team.

**Big Picture design**

**Structure:** windows forms application and class library

**Data:** SQL and text file for storage.

**Users:** One at a time on one application! (no need for authentication or handling multiple users at same time)

**Key concepts:**

**Email** (how do we handle this)

**SQL** (how to we access our data)

**Custom event** (when a game is complete, how do we know if there are more games, how do we know when to trigger emails, payouts)

**Error handling** (we cant rely on users entering perfect info, we need a way to handle this, edit this)

**Interfaces (**how to pass info back and forth from form to form **)**

**Random Ordering** (who gets what is what order)

Possible addition optional

**Texting (**ability to text other users. Capture phone number, or option of getting texts**)**

Data design

we should try mapping the data. Its ok if we miss stuff. This is just about getting an idea of what we need to when we go to code we have a base… think about other applications you use. What info do they use? Could that be applicable to our needs? We can always come back to edit or add things.

Team

* teamMembers(list<person>) //atleast need one person on a team
* TeamName(string)

Person

* Firstname(string)
* Lastanme(string)
* EmailAdress (string)
* CellPhoneNumber (string) //why string? Might want to using some formatting. We don’t need to add or do any math. This isn’t a number to be manipulated.

Tournament

* TournamentName(String)
* EntryFee(decimal) //why? Decimal is very precise ..use this for money!
* EnteredTeams(List<Team>)
* Prizes(list<prizes>)
* Rounds(list<list<matchup>>) list of lists of matchups. One for each round

Prize

* PlaceNumber(int)
* placeName(string)
* PrizeAmount (decimal)
* PrizePercentage(double)

Matchup

* Entries(list<matchupEntry>)
* matchupRound(int)

matchupEntry

* teamCompeting(team)
* score(double)
* ParentMatchup(matchup) //so we can order by ….. && this team came from… ||going to…