

App Requirements

Wednesday, February 18, 2015 9:52 AM

1. Opening Menu

- a. Start Game
 - Date, Time, Location Select
 - Team/Roster select (home and visitor) with add team option
 - Competition Type (Regular, Playoff, etc.)
- b. Edit Team (defined by Hammer)
 - Buttons to add, remove, and trade players
- c. About
 -

2. Stats Recorded

- a. AB – The number of times at bat.
- b. H – The number of hits. A hit occurs when a player bats a fair ball and reaches base, all without error from the defense.
- c. BA – The batting average of a player is one of the most common baseball batting statistics. This is the number of hits a player has divided by the number of times at bat. Thus $BA = H/AB$
- d. 1B – The number of singles. This is the number of hits which a player makes it to first base safely.
- e. 2B – The number of doubles. This is the number of hits which a player makes it to second base safely.
- f. 3B – The number of triples. This is the number of hits which a player makes it to third base safely.
- g. HR – The number of home runs. This is the number of hits which a player makes it to all four bases safely.
- h. RBI – Runs Batted In. This is the total number of base runners who safely make it home due to actions of a batter.
- i. BB – Base on Balls. This is more commonly referred to as a walk, and occurs when a player does not swing at four pitches which have been thrown outside the strike zone.
- j. K or SO – Number of strikeouts. This occurs when a third strike is pitched to a player, or when a third strike is swung at and missed. It also occurs when a third strike is bunted into foul territory.
- k. TB – Total bases. This is calculated by adding the total number of bases reached on a hit. It is calculated by the formula: singles + 2(doubles) + 3(triples) + 4(home runs) = $1B + (2 \times 2B) + (3 \times 3B) + (4 \times HR)$
- l. SLG – Slugging average is calculated by dividing the total bases by times at bat. Thus $SLG = TB/AB$
- m. ISO – Isolated power. This baseball statistic gives an indication of a player's ability to reach extra bases on a hit. It is calculated by subtracting the batting average from the slugging average by the formula $ISO = SLG - BA = (TB - H)/AB$.
- n. ER – Earned run. This is a pitching statistic that counts the number of runs scored that were not due to errors.
- o. ERA – Earned run average. This is another pitching statistic. It is nine times the number of earned runs, then divided by the number of innings pitched. The formula is $(9 \times ER)/(\text{innings pitched})$

3. Keep editable roster of players on team (defined by John Hammer)

- a. Divide into leagues, then divisions, then teams.
 - i. Image buttons of team logos
 - ii. Player names

4. Develop Reports

- a. Player Select
- b. Stat Select
- c. Export viewable/downloadable spreadsheet

UML Designs

Wednesday, February 18, 2015

10:08 AM