CptS322 - Reading Assignment 2

Due: Wednesday November 10, 11:59pm (please submit on Canvas)

Please read the following book chapters/articles and answer questions 1 and 2.

1. McConnell, S. Code Complete: Design in Construction (see attachment)

2. Practical UML: A hands on introduction for developers, by Randy Miller
   https://edn.embarcadero.com/article/31863 OR
   http://people.cs.pitt.edu/~chang/153/UML/UML.htm

Questions:
1. **(50%)**
(a) Read the sections "5.2 Key Design Concepts" and "5.3 Design Building Blocks: Heuristics" (pages 77 through 110) from the "Code Complete: Design in Construction" book chapter.
(b) In iteration-2, you need to revise and improve your project design and update your design document accordingly. In addition, you need to detail how you will design and implement each subsystem and document your class level design.
Pick three design concepts from sections 5.2 and 5.3 in the above book chapter that will help you in revising your design for iteration-2. Summarize each of those three concepts briefly and explain how you will change and expand your design according to those design concepts.

2. **(50%)**
You will build a UML class diagram to model the following application for managing a kid's soccer league.
"*The soccer league includes at least four soccer teams where each team is composed of 12 to 18 players. Each team has a name and a hometown. In each team, one of the players is assigned as the captain and the systems should maintain how long the captain has served the team (in number of months). The current rank in the league and total score is maintained for each team. In each team, players have assigned numbers and positions (e.g. left-defense, mid-forward, etc.) Some teams are led by a team coach (but others may not have a coach). Each team coach has a level of accreditation and a number of years of experience, and a coach can lead multiple teams. For all people (players and coaches), the names, addresses, and phone numbers need to be maintained. In the league, soccer teams play games against each other (each game involves 2 teams). Each game has a score and a location and team scores should be updated after each game.*"
Draw a UML class diagram for the above application and be sure to label all associations with appropriate multiplicities. Mention the additional assumptions you have made in your design. You can use "draw.io" tool to draw your class diagram.

Submission Instructions:
- Save your file as .pdf and name it as ***yourteamname*_RA2.pdf** (replace *yourteamname* with your own).
- Submit the pdf file to the "**Reading Assignment 2**" dropbox on Canvas (on Assignments page).
- One submission per team. Have one of your team members submit it on Canvas.