

Project 5 - Submit an abstract

- Include group number, members' names, and presentation date.
 - Group number 5
 - Roshan Chavar, Aidan Kiser, Colin Moore
 - April 10th 2024 (9:15 - 9:30)
- Explain ideas your group works on
 - We were planning on making a sports related system to represent the different ideas behind the sport either using a class diagram to represent the different parts of the sport, or using a state diagram to represent the different states of the sport depending on certain fouls which could be committed, different periods of the game, etc. We were planning on either considering basketball, football, or tennis.
- Explain motivations of selected topics and examples
 - Everyone in our group enjoys leisurely watching sports and keeps up with sports regularly. Also as students of auburn we have all watched several different sporting events, so those are possible topic selections. Also two of the members play tennis regularly, so that was motivation for possibly considering tennis as the sport. As football is such a large and important part of auburn's athletics department, it is likely that football will be specifically chosen for the specific topic. Specifically, we think that a state diagram would work best as there are many different states which make up every sports game, and it would overall be a more complete way to represent sporting games. Use case diagrams could possibly work, but overall state diagrams would work better. Also class diagrams would not work very well as sporting games are such higher paced games which change from state to state and class diagrams would not work as well for that.
- Describe how your group analyzes examples to present diagrams
 - We will be analyzing different aspects of a game so we can look at any sort of examples regarding the game chosen, and gather different rules and states of the game and implement those in the diagrams. These can be represented as different states or use cases depending on the chosen method to depict the system.
- State conclusions relating to your analysis. And if possible, propose some better ideas to improve them
 - We would be able to conclude from our analysis if there are any sort of rule advancements or rule changes that could come about. Also, integration of new technologies to enhance the spectator experience and player performance. For example, introducing a more nuanced foul

system in football that differentiates between unintentional and strategic fouls could add a layer of strategy without overly penalizing teams for minor infractions.