

CSCI 4440 — Software Design and Documentation  
Mini-Assignment 3 (document version 1.0) — DUE October 8, 2020  
Analysis Classes

## Overview

- This third mini-assignment is to be completed in groups of either two or three students (at most) and is due by 11:59PM EDT on the due date shown above
- Define your group in Submittity in the Mini-Assignment 3 gradeable, then only one of you need submit your final work; if submitted late, all group members must use a late day

## What to do

For this third mini-assignment, you will focus on analysis, in particular identifying analysis classes for the game of chess. Using the last few slides from October 5, continue the noun/verb analysis to come up with analysis classes for the game of chess. Attempt to capture all of the rules of chess beyond the description given in the slides.

Create **three** different sets of class diagrams (sets *A*, *B*, and *C*) that show three distinct approaches to representing the analysis classes. As an example, one set of class diagrams might have BlackSquare and WhiteSquare as subclasses to Square, while another set of class diagrams might simply have color be an attribute of Square.



For each set of analysis classes *A*, *B*, and *C*, show a fully adorned class diagram that does not show any relationships between classes. Also for each, show a class diagram that focuses on the relationships and constraints between classes. Finally, provide a brief write-up describing the key differences and which you would prefer to use.

Be sure to avoid thinking about or discussing design. These are analysis classes and are therefore purely in the language of the problem domain.

## What to submit

Please submit a single PDF file (in “landscape mode”) that captures and describes your three distinct sets of analysis classes. Each set of analysis classes should start on a new page. The last page should be your write-up describing the key differences. And as per usual, proofread your work before submitting. We will assign grades (and provide feedback) based on the above details and the quality of your presentation.