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Project Name: Programming Project 1 - Tallest Basketball Player

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Description:

The goal of this program is to find the tallest player with an acceptable age.

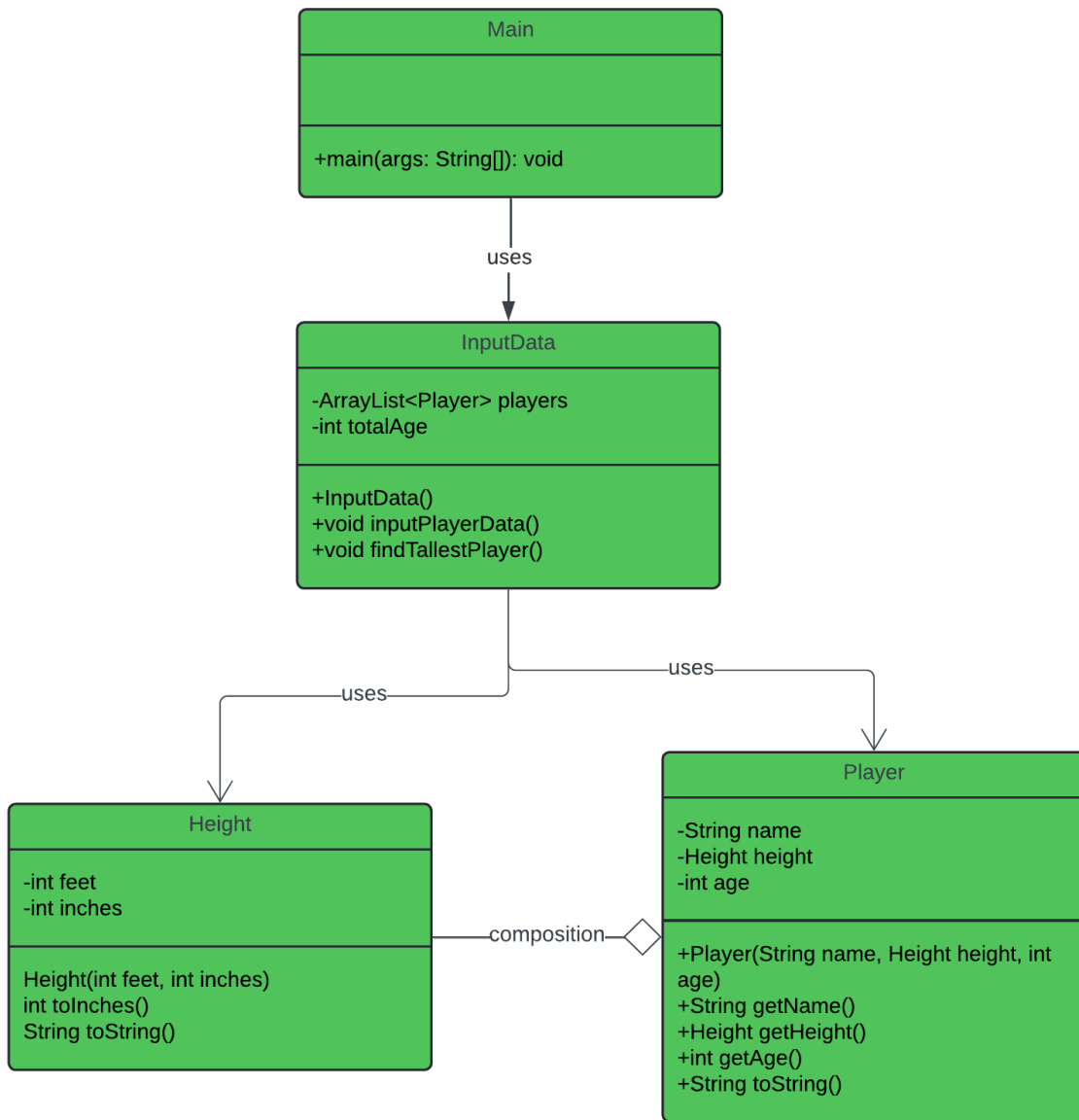
There are three classes.

The height class contains two integer instance variables for the feet and inches.

Player class contains three instance variables that include the player's name, the player's height, which is stored as the type of Height and the player's age.

InputData class prompts the user for the input and creates a player obj using the Height class calculates the average age and finds the tallest player with less or equal average age.

UML Diagram



Test Plan

Base functionality Test	<pre>Enter player data or type 'stop' to end: Enter player's name: Brad Enter player's height [format: feet inches]: 5 2 Enter player's age: 25 Enter player's name: Mike Enter player's height [format: feet inches]: 5 5 Enter player's age: 23 Enter player's name: Kile Enter player's height [format: feet inches]: 5 8 Enter player's age: 27 Enter player's name: Robert Enter player's height [format: feet inches]: 6 4 Enter player's age: 24 Enter player's name: stop Average age of all players: 24.75 The tallest player with less or equal average age: Name: Robert , Height: 6'4", Age: 24</pre>
Empty input	<pre>Enter player data or type 'stop' to end: Enter player's name: stop Average age of all players: NaN There is no player that has an age less than or equal to the average age.</pre>
Handling similar Inputs	<pre>Enter player data or type 'stop' to end: Enter player's name: S Enter player's height [format: feet inches]: 5 11 Enter player's age: 20 Enter player's name: BA Enter player's height [format: feet inches]: 5 11 Enter player's age: 20 Enter player's name: SA Enter player's height [format: feet inches]: 5 11 Enter player's age: 20 Enter player's name: stop Average age of all players: 20.0 The tallest player with less or equal average: Name: S, Height: 5'11", Age: 20</pre>

Lesson Learned

This was a good practice on the general OOP principles. I used a modular concept, dividing the classes that can be reused elsewhere. I always struggled with error handling concepts, thus this time I tried implementing the bare bone error handling, which made it easier to troubleshoot. I faced a few problems with a general language syntax that took me a minute to figure out.