

SIT102 Introduction to Programming



Pass Task 5.1: Structs and Enums

Overview

In this task you will create a knight database to help Camelot keep track of all of their knights.

Submission Details

Submit the following files to OnTrack.

- Your program code
- A screen shot of your program running
- A PDF of the answers to the questions in the Word file in the task resources

The focus of this task is on the declaration and use of structs and enums.

Instructions

Lets get started.

1. Watch the topic 5 videos, these will guide you through building the knights program. Make sure you have the following:
 - A **knight_data** type with a **name** and an **age**.
 - A function to **read knight** from the terminal - returning knight data
 - A procedure to **write knight** to the terminal - using pass by reference
 - An **update knight** procedure to allow parts of a knight to be changed
 - A **knight_update_option** enumeration to capture the options available when editing a knight
 - A function to get a **knight_update_option** from the user.
2. Make the following changes to the program:
 - Add a **month of birth** to each knight
 - Add an **additional** field of your own choice to each knight
 - Update the enumeration to include additional options to update these new details when editing a knight.
 - Update the **read**, **write**, and **update** functions/procedures to make use of this new field
3. Answer the associated questions.

Once finished remember to grab a screenshot and upload your work to OnTrack.

Task Discussion

Discuss the following with your tutor to demonstrate your understanding of the concepts covered.

- How have structs and enums help you structure the code in this program?
- How do you go about extending a struct to include new fields?
- How do you go about extending an enum to include new options?
- How does pass by reference work with updating the knight?