## UNIVERSITY OF TECHNOLOGY JAMAICA

# Faculty of Engineering and Computing School of Computing and Information Technology

## CIT2004

Object-Oriented Programming
OOP Group Project

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Due Date: April 13, 2024

# UNIVERSITY OF TECHNOLOGY, JAMAICA Declaration of Authorship

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School/Depart	ment: Computing and Information Technology		
Course Code &	& Title:CMP 1025 - Object-Oriented Programming		
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is fully acknowled	lged and disclosed in the paper. I have also cited all sources from which I used visuals		
	ds, either quoted directly or paraphrased. I also certify that this paper was prepared by r this course. I also understand that a grade will not be assigned without the submission		
of this agreement.	t this course. I this didderstand that a grade will not be assigned without the sacrinostor		
Student's Sign	$ature: \frac{1}{\sqrt{ \alpha y }} $		
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	pervisor's Grade for Assignment:		
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Lecturer's/Suj	pervisor's Comments:		

Note: For group assignments each student is required to complete a separate Declaration of Authorship.

**Ref: Regulation 5**: Conditions and Procedures Governing Student Academic Misconduct

## UNIVERSITY OF TECHNOLOGY, JAMAICA Declaration of Authorship

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School/Departme	ent: Computing & Information Technology			
Course Code & T	Title: Object Oriented Programming CMP1025			
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******	*****************			
is fully acknowledge data, ideas or words,	y that I am the author of this paper and that any assistance I received in its preparation d and disclosed in the paper. I have also cited all sources from which I used visuals either quoted directly or paraphrased. I also certify that this paper was prepared by me course. I also understand that a grade will not be assigned without the submission of			
Student's Signat	ure: K.Eastwood			
******	****************			
Lecturer's/Supervisor's Grade for Assignment:				
Lecturer's/Super	rvisor's Comments			

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## UNIVERSITY OF TECHNOLOGY, JAMAICA Declaration of Authorship

FACULTY:	Engineering and Computing
School/Depa	artment: Computing & Information Technology
Course Code	e & Title:Object Oriented Programming CMP1025
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*****	**************************************
is fully acknow data, ideas or w	certify that I am the author of this paper and that any assistance I received in its preparation reledged and disclosed in the paper. I have also cited all sources from which I used visuals rords, either quoted directly or paraphrased. I also certify that this paper was prepared by me this course. I also understand that a grade will not be assigned without the submission of
Student's Si	gnature: Paris Scott
	*******************
Lecturer's/S	Supervisor's Grade for Assignment:
Lecturer's/S	Supervisor's Comments :

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## **Group Members Contribution Report**

Eastwood, Callam, Scott, Taylor – AMCS 2

Members	Contributions
Eastwood	Athlete and Coach classes
	Fixing errors
	Main (driver) file
Callam	User, Agent, and Sponsor classes
	OOA
	OOD
Scott	Association and Coach classes
	OOA
	OOD
Taylor	Admin class
	OOA
	OOD - UML
	Main (driver) file
	Fixing errors & compiling project
	Manual

## **Object Oriented Analysis**

## **General Analysis**

#### Nouns

The Ministry of Entertainment and Sports, Computerized System, Jamaica, Associations, identification numbers, addresses, number of clubs, athletes, TRN, first name, middle name, last name, gender, date of birth, height, weight, nationality, affiliated club, affiliated sponsor, sponsor, name, affiliated athlete's name, amount of sponsorship, club, code, name, colour, total membership, president, head coach, associated association, coach, TRN, full name, date of birth, gender, date of employment, date of separation, commission

#### Verbs

Add, view, delete, update, negotiates, gets, pay, switch, manage

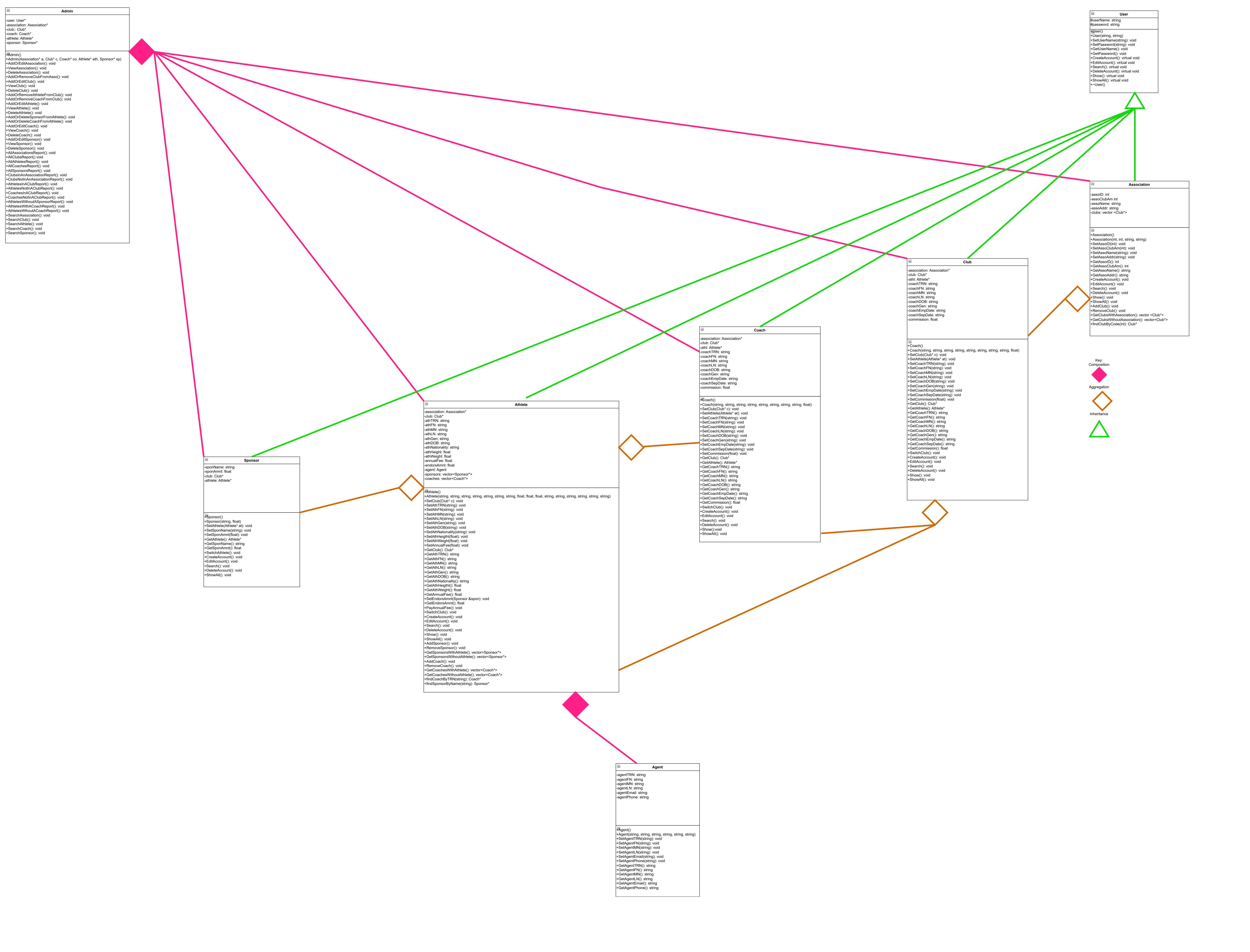
## Specific Classes, Attributes and Methods

Classes	Attributes	Methods
Admin		AdminLogin
		ManageAssociation
		ManageClub
		ManageAthlete
		SingleClubReport
		AllClubsReport
		AthletesInAClubReport (all athletes in a club)
		AthletesNotInAClubReport (all athletes not in a club at all)
		Athletes With Sponsor Report (all athletes with a sponsor)
		AthletesWithoutSponsorReport (all athletes without a
		sponsor)
		SearchAssociation
		SearchCoach (athletes working with a specific coach)
		SearchClub (athletes in a specific club)
		AthleteInfoReport (search one athlete)
User	UserName	CreateAccount
	Password	EditAccount
		DeleteAccount
		ShowAccountInfo
Association	assoID	
	assoAddress	CreateAccount
	assoNumOfClubs	EditAccount
	assoClubName	DeleteAccount
		AddClub (sounds like a mutator for assoClubName)
		DeleteClub
Club	clubCode	CreateAccount
	clubName	EditAccount

	clubColour	DeleteAccount
	clubMembershipAmount	PayClubAssoFee
	clubPresident	CalculateClubAnnualFee
	clubHeadCoach	PayAnnualFeeToCoach
	association	
	clubAssoFee (1%)	
	annualFee(10%)	
Coach	coachTRN	CreateAccount
	coachFirstName	EditAccount
	coachMiddleName	DeleteAccount
	coachLastName	
	coachDOB	
	coachGender	
	coachEmploymentDate	
	coachSeparationDate	
	commission	
	annualFee(10%)	
Athlete	athTRN	CreateAccount
	athPassword	EditAccount
	athFirstname	DeleteAccount
	athMiddleName	DeleteAthleteFromClub
	athLastName	AddAthleteToClub
	athGender	SwitchClub (mutator for athClub)
	athDOB	PayAnnualFeeToClubORCoach
	athHeight	ayAmidan ce toetdookeoach
	athWeight	
	_	
	athNationality athClub	
	athClubUserName	
	athClubPassword	
	athSponsor	
	annualFeeToClubORCoach	
Agent	agentTRN	
	agentFirstName	
	agentMiddleName	
	agentLastName	
	agentEmail	
	agentPhone	
Sponsor	sponName	CreateAccount
	sponAmount	EditAccount
		DeleteAccount

**Object Oriented Design** 

**UML Diagram** 



-user: User\*
-association: Association\*

+AddOrEditAssociation(): void

+ViewAssociation(): void

+AddOrEditClub(): void

+ViewClub(): void +DeleteClub(): void

+DeleteAssociation(): void

+AddOrEditAthlete(): void +ViewAthlete(): void

+AddOrEditCoach(): void +ViewCoach(): void +DeleteCoach(): void +AddOrEditSponsor(): void +ViewSponsor(): void +DeleteSponsor(): void +AllAssociationsReport(); void +AllClubsReport() void +AllAthletesReport(): void +AllCoachesReport(): void +AllSponsorsReport(): void

+SearchAssociation(): void +SearchClub(): void +SearchAthlete(): void +SearchCoach(): void +SearchSponsor(): void

-club;: Club\*
-coach: Coach\*
-athlete: Athlete\*
-sponsor: Sponsor\*

## **MES Sports Management System User Manual**

#### Introduction

The Ministry of Entertainment and Sports (MES) Sports Management System is a console-based application designed to manage sports-related activities. The system is divided into two main sections: **Administrator** and **User**.

#### **VALID LOGIN PASSWORDS** for each section:

```
Administrator == "admin2024"

Association == "assoPass2024"

Club == "clubPass2024" OR "sportsForLife2024"

Coach == "coachPass2024"

Athlete == "athlPass2024"

Sponsor == "sponPass2024"
```

As for UserNames, there are no correct ones, just don't leave it blank.

#### Main Menu

When you run the program, you will be greeted with the main menu, which looks like this:

```
====== Welcome to the Ministry of Entertainment and Sports (MES) Sports Management System ======

MAIN MENU - Select section:

1. Administrator

2. User

3. Exit
```

You can navigate through the system by entering the number corresponding to your desired section.

#### 1. Administrator Section

If you enter 1, you will be directed to the **Administrator** section. More details about this section will be provided in the subsequent parts of the manual.

#### 2. User Section

If you enter 2, you will be directed to the **User** section. More details about this section will be provided in the subsequent parts of the manual.

#### 3. Exit

If you enter 3, the program will terminate, and you will see the following message: Exiting program. Goodbye!

If you enter a number that does not correspond to any of the options, you will see the message: Invalid choice. Please try again. The main menu will then be displayed again.

This loop will continue until you choose to exit the program by entering 3.

#### **Administrator Section**

The Administrator section is accessed by entering 1 in the main menu. You will then be prompted to enter the Admin PIN. The correct PIN is admin2024.

If the correct PIN is entered, you will be welcomed to the Administrator section and presented with the following options:

Select section:

- 1. Manage Association
- 2. Manage Club
- 3. Manage Coach
- 4. Manage Athlete
- 5. Manage Sponsor
- 6. Exit

You can navigate through the Administrator section by entering the number corresponding to your desired operation.

#### 1. Manage Association

If you enter 1, you will be directed to the **Manage Association** section. More details about this section will be provided in the subsequent parts of the manual.

## 2. Manage Club

If you enter 2, you will be directed to the **Manage Club** section. More details about this section will be provided in the subsequent parts of the manual.

#### 3. Manage Coach

If you enter 3, you will be directed to the **Manage Coach** section. More details about this section will be provided in the subsequent parts of the manual.

## 4. Manage Athlete

If you enter 4, you will be directed to the **Manage Athlete** section. More details about this section will be provided in the subsequent parts of the manual.

## 5. Manage Sponsor

If you enter 5, you will be directed to the **Manage Sponsor** section. More details about this section will be provided in the subsequent parts of the manual.

#### 6. Exit

If you enter 6, the Administrator section will close, and you will see the message: Exiting Admin Section. Goodbye.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Administrator section by entering 6.

If an incorrect PIN is entered, access to the Administrator section will be denied with the message: Incorrect PIN. Access Denied.

## **Manage Association Section**

The Manage Association section is accessed from the Administrator section. This section allows the admin to manage various aspects of an association.

In this section, you will be presented with the following options:

Select section:

- 1. Add or Edit Association account
- 2. View Association account
- 3. Delete Association
- 4. Add or Remove Club from Association
- 5. Report on all Associations
- 6. Report on Clubs in an Association
- 7. Report on Clubs not in an Association
- 8. Search Association
- 9. Exit

You can navigate through the Manage Association section by entering the number corresponding to your desired operation.

## 1. Add or Edit Association account

If you enter 1, the AddOrEditAssociation () function will be called, allowing you to add a new association or edit an existing one.

#### 2. View Association account

If you enter 2, the ViewAssociation () function will be called, allowing you to view the details of the association added or edited.

#### 3. Delete Association

If you enter 3, the DeleteAssociation () function will be called, allowing you to delete an association.

#### 4. Add or Remove Club from Association

If you enter 4, the AddOrRemoveClubFromAsso() function will be called, allowing you to add a club to an association or remove a club from an association by supplying the club code.

## 5. Report on all Associations

If you enter 5, the AllAssociationsReport () function will be called, generating a report on all associations.

#### 6. Report on Clubs in an Association

If you enter 6, the ClubsInAnAssociationReport () function will be called, generating a report on all clubs in a specific association.

## 7. Report on Clubs not in an Association

If you enter 7, the ClubsNotInAnAssociationReport () function will be called, generating a report on all clubs not currently in an association.

## 8. Search Association

If you enter 8, the SearchAssociation () function will be called, allowing you to search for a specific association by its ID.

#### 9. Exit

If you enter 9, you will exit the Manage Association section and return to the Administrator section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Manage Association section by entering 9.

### **Manage Club Section**

The Manage Club section is accessed from the Administrator section. This section allows the admin to manage various aspects of a club.

In this section, you will be presented with the following options:

Select section:

- 1. Add or Edit Club account
- 2. View Club account
- 3. Delete Club account
- 4. Add or Remove Athlete from Club
- 5. Add or Remove Coach from Club
- 6. Report on all Clubs
- 7. Report on Athletes in a Club
- 8. Report on Athletes not in a Club
- 9. Report on Coaches in a Club
- 10. Report on Coaches not in a Club
- 11. Search Club
- 12. Exit

You can navigate through the Manage Club section by entering the number corresponding to your desired operation.

#### 1. Add or Edit Club account

If you enter 1, the AddOrEditClub() function will be called, allowing you to add a new club or edit an existing one.

#### 2. View Club account

If you enter 2, the ViewClub () function will be called, allowing you to view the details of the club added or edited.

#### 3. Delete Club account

If you enter 3, the DeleteClub () function will be called, allowing you to delete a club.

## 4. Add or Remove Athlete from Club

If you enter 4, the AddOrRemoveAthleteFromClub() function will be called, allowing you to add an athlete to a club or remove an athlete from a club by TRN.

#### 5. Add or Remove Coach from Club

If you enter 5, the AddOrRemoveCoachFromClub() function will be called, allowing you to add a coach to a club or remove a coach from a club by TRN.

## 6. Report on all Clubs

If you enter 6, the AllClubsReport () function will be called, generating a report on all clubs.

## 7. Report on Athletes in a Club

If you enter 7, the AthletesInAClubReport () function will be called, generating a report on all athletes in a specific club.

## 8. Report on Athletes not in a Club

If you enter 8, the AthletesNotInAClubReport () function will be called, generating a report on all athletes not currently in a club.

## 9. Report on Coaches in a Club

If you enter 9, the CoachesInAClubReport () function will be called, generating a report on all coaches in a specific club.

## 10. Report on Coaches not in a Club

If you enter 10, the CoachesNotInAClubReport () function will be called, generating a report on all coaches not currently in a club.

#### 11. Search Club

If you enter 11, the SearchClub() function will be called, allowing you to search for a specific club by club code.

#### **12. Exit**

If you enter 12, you will exit the Manage Club section and return to the Administrator section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Manage Club section by entering 12.

## **Manage Coach Section**

The Manage Coach section is accessed from the Administrator section. This section allows the admin to manage various aspects of a coach.

In this section, you will be presented with the following options:

Select section:

- 1. Add or Edit Coach account
- 2. View Coach account
- 3. Delete account
- 4. Report on all Coaches

- 5. Search Coach
- 6. Exit

You can navigate through the Manage Coach section by entering the number corresponding to your desired operation.

#### 1. Add or Edit Coach account

If you enter 1, the AddOrEditCoach() function will be called, allowing you to add a new coach or edit an existing one.

#### 2. View Coach account

If you enter 2, the ViewCoach () function will be called, allowing you to view the details of the coach added or edited.

#### 3. Delete account

If you enter 3, the DeleteCoach () function will be called, allowing you to delete a coach.

## 4. Report on all Coaches

If you enter 4, the AllCoachesReport () function will be called, generating a report on all coaches.

## 5. Search Coach

If you enter 5, the SearchCoach () function will be called, allowing you to search for a specific coach by TRN.

#### 6. Exit

If you enter 6, you will exit the Manage Coach section and return to the Administrator section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Manage Coach section by entering 6.

## **Manage Athlete Section**

The Manage Athlete section is accessed from the Administrator section. This section allows the admin to manage various aspects of an athlete.

In this section, you will be presented with the following options:

Select section:

- 1. Add or Edit Athlete account
- 2. View account
- 3. Delete account
- 4. Add or Remove Sponsor from Athlete
- 5. Add or Delete Coach from account
- 6. Report on all Athletes
- 7. Report on Athletes with a Sponsor
- 8. Report on Athletes without a Sponsor
- 9. Report on Athletes with a Coach
- 10. Report on Athletes without a Coach
- 11. Search Athlete
- 12. Exit

You can navigate through the Manage Athlete section by entering the number corresponding to your desired operation.

#### 1. Add or Edit Athlete account

If you enter 1, the AddOrEditAthlete() function will be called, allowing you to add a new athlete or edit an existing one.

#### 2. View account

If you enter 2, the ViewAthlete() function will be called, allowing you to view the details of the athlete added or edited.

#### 3. Delete account

If you enter 3, the DeleteAthlete() function will be called, allowing you to delete an athlete.

## 4. Add or Remove Sponsor from Athlete

If you enter 4, the AddOrDeleteSponsorFromAthlete() function will be called, allowing you to add a sponsor to an athlete or remove a sponsor from an athlete by sponsor name.

#### 5. Add or Delete Coach from account

If you enter 5, the AddOrDeleteCoachFromAthlete() function will be called, allowing you to add a coach to an athlete or remove a coach from an athlete by TRN.

## 6. Report on all Athletes

If you enter 6, the AllAthletesReport () function will be called, generating a report on all athletes.

## 7. Report on Athletes with a Sponsor

If you enter 7, the AthletesWithASponsorReport () function will be called, generating a report on all athletes with a sponsor.

## 8. Report on Athletes without a Sponsor

If you enter 8, the AthletesWithoutASponsorReport () function will be called, generating a report on all athletes without a sponsor.

## 9. Report on Athletes with a Coach

If you enter 9, the AthletesWithACoachReport () function will be called, generating a report on all athletes with a coach.

## 10. Report on Athletes without a Coach

If you enter 10, the AthletesWithoutACoachReport () function will be called, generating a report on all athletes without a coach.

#### 11. Search Athlete

If you enter 11, the SearchAthlete() function will be called, allowing you to search for a specific athlete by TRN.

#### 12. Exit

If you enter 12, you will exit the Manage Athlete section and return to the Administrator section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Manage Athlete section by entering 12.

## **Manage Sponsor Section**

The Manage Sponsor section is accessed from the Administrator section. This section allows the admin to manage various aspects of a sponsor.

In this section, you will be presented with the following options:

Select section:

- 1. Add or Edit Sponsor account
- 2. View Sponsor account
- 3. Delete Sponsor account
- 4. Report on all Sponsors
- 5. Search Sponsor
- 6. Exit

You can navigate through the Manage Sponsor section by entering the number corresponding to your desired operation.

## 1. Add or Edit Sponsor account

If you enter 1, the AddOrEditSponsor() function will be called, allowing you to add a new sponsor or edit an existing one.

## 2. View Sponsor account

If you enter 2, the ViewSponsor () function will be called, allowing you to view the details of the sponsor added or edited.

## 3. Delete Sponsor account

If you enter 3, the DeleteSponsor() function will be called, allowing you to delete a sponsor.

## 4. Report on all Sponsors

If you enter 4, the AllSponsorsReport () function will be called, generating a report on all sponsors.

## 5. Search Sponsor

If you enter 5, the SearchSponsor () function will be called, allowing you to search for a specific sponsor by name.

## 6. Exit

If you enter 6, you will exit the Manage Sponsor section and return to the Administrator section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Manage Sponsor section by entering 6.

#### **User Section**

The User Section is accessed from the main menu. This section allows the user to view various aspects of the system.

In this section, you will be presented with the following options:

Select section:
1. Association

- 2. Club
- 3. Coach
- 4. Athlete
- 5. Sponsor
- 6. Exit

You can navigate through the User section by entering the number corresponding to your desired operation. Each option will take you to the respective section where you can view more details. If you enter 6, you will exit the User section and return to the main menu.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the User section by entering 6.

#### **Association Section**

The Association section is accessed from the User section. This section allows the user to interact with various aspects of an association.

In this section, you will be presented with the following options:

Select section:

- 1. Create association account
- 2. Edit association account
- 3. Search for association account
- 4. Delete association account
- 5. View association account
- 6. View all associations
- 7. Add Club
- 8. Remove club
- 9. See clubs in an association
- 10. See clubs without association
- 11. Exit

You can navigate through the Association section by entering the number corresponding to your desired operation.

#### 1. Create association account

If you enter 1, the CreateAccount () function will be called, allowing you to create a new association account.

## 2. Edit association account

If you enter 2, the EditAccount () function will be called, allowing you to edit an existing association account.

#### 3. Search for association account

If you enter 3, the Search () function will be called, allowing you to search for a specific association account by ID.

#### 4. Delete association account

If you enter 4, the DeleteAccount () function will be called, allowing you to delete an association account.

#### 5. View association account

If you enter 5, the Show () function will be called, allowing you to view the details of an association account.

## 6. View all associations

If you enter 6, the ShowAll () function will be called, generating a list of all associations.

#### 7. Add Club

If you enter 7, the AddClub () function will be called, allowing you to add a club to an association.

#### 8. Remove club

If you enter 8, the RemoveClub () function will be called, allowing you to remove a club from an association.

#### 9. See clubs in an association

If you enter 9, the GetClubsWithAssociation () function will be called, generating a list of all clubs in a specific association.

## 10. See clubs without association

If you enter 10, the GetClubsWithoutAssociation () function will be called, generating a list of all clubs not currently in an association.

#### 11. Exit

If you enter 11, you will exit the Association section and return to the User section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Association section by entering 11.

#### **Club Section**

The Club section is accessed from the User section. This section allows the user to interact with various aspects of a club.

In this section, you will be presented with the following options:

Select section:

- 1. Create club account
- 2. Edit club account
- 3. Search for club account
- 4. Delete club account
- 5. View club account
- 6. View all clubs
- 7. Add Athlete
- 8. Remove Athlete
- 9. See athletes in a club
- 10. See athletes not in a club
- 11. Add Coach
- 12. Remove Coach
- 13. See coaches in a club
- 14. See coaches not in a club
- 15. Exit

You can navigate through the Club section by entering the number corresponding to your desired operation.

#### 1. Create club account

If you enter 1, the CreateAccount () function will be called, allowing you to create a new club account.

### 2. Edit club account

If you enter 2, the EditAccount () function will be called, allowing you to edit an existing club account.

#### 3. Search for club account

If you enter 3, the Search () function will be called, allowing you to search for a specific club account by code.

#### 4. Delete club account

If you enter 4, the DeleteAccount () function will be called, allowing you to delete a club account.

## 5. View club account

If you enter 5, the Show () function will be called, allowing you to view the details of a club account.

#### 6. View all clubs

If you enter 6, the ShowAll() function will be called, generating a list of all clubs.

#### 7. Add Athlete

If you enter 7, the AddAthlete() function will be called, allowing you to add an athlete to a club.

#### 8. Remove Athlete

If you enter 8, the RemoveAthlete() function will be called, allowing you to remove an athlete from a club.

#### 9. See athletes in a club

If you enter 9, the GetAthletesWithClub() function will be called, generating a list of all athletes in a specific club.

#### 10. See athletes not in a club

If you enter 10, the GetAthletesWithoutClub() function will be called, generating a list of all athletes not currently in a club.

#### 11. Add Coach

If you enter 11, the AddCoach () function will be called, allowing you to add a coach to a club.

#### 12. Remove Coach

If you enter 12, a new Club object will be created and the RemoveCoach () function will be called, allowing you to remove a coach from a club.

## 13. See coaches in a club

If you enter 13, the GetCoachesWithClub() function will be called, generating a list of all coaches in a specific club.

#### 14. See coaches not in a club

If you enter 14, the GetCoachesWithoutClub() function will be called, generating a list of all coaches not currently in a club.

#### **15. Exit**

If you enter 15, you will exit the Club section and return to the User section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Club section by entering 15.

#### **Coach Section**

The Coach section is accessed from the User section. This section allows the user to interact with various aspects of a coach.

In this section, you will be presented with the following options:

Select section:

- 1. Create coach account
- 2. Edit coach account
- 3. Search for coach account
- 4. Delete coach account
- 5. View coach account
- 6. View all coaches
- 7. Switch club
- 8. Exit

You can navigate through the Coach section by entering the number corresponding to your desired operation.

#### 1. Create coach account

If you enter 1, the CreateAccount () function will be called, allowing you to create a new coach account.

### 2. Edit coach account

If you enter 2, the EditAccount () function will be called, allowing you to edit an existing coach account.

#### 3. Search for coach account

If you enter 3, the Search () function will be called, allowing you to search for a specific coach account.

### 4. Delete coach account

If you enter 4, the DeleteAccount () function will be called, allowing you to delete a coach account.

#### 5. View coach account

If you enter 5, the Show () function will be called, allowing you to view the details of a coach account.

#### 6. View all coaches

If you enter 6, the ShowAll () function will be called, generating a list of all coaches.

#### 7. Switch club

If you enter 7, the SwitchClub () function will be called, allowing you to switch the club of a coach.

#### 8. Exit

If you enter 8, you will exit the Coach section and return to the User section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Coach section by entering 8.

#### **Athlete Section**

The Athlete section is accessed from the User section. This section allows the user to interact with various aspects of an athlete.

In this section, you will be presented with the following options:

Select section:

- 1. Create athlete account
- 2. Edit athlete account
- 3. Search for athlete account
- 4. Delete athlete account
- 5. View athlete account
- 6. View all athletes
- 7. Add sponsor
- 8. Remove sponsor
- 9. See all athletes with a sponsor
- 10. See all athletes without a sponsor
- 11. Add coach
- 12. Remove coach
- 13. See all athletes with a coach
- 14. See all athletes without a coach
- 15. Switch club
- 16. Exit

You can navigate through the Athlete section by entering the number corresponding to your desired operation.

#### 1. Create athlete account

If you enter 1, the CreateAccount () function will be called, allowing you to create a new athlete account.

#### 2. Edit athlete account

If you enter 2, the EditAccount () function will be called, allowing you to edit an existing athlete account.

## 3. Search for athlete account

If you enter 3, the Search () function will be called, allowing you to search for a specific athlete account.

#### 4. Delete athlete account

If you enter 4, the DeleteAccount () function will be called, allowing you to delete an athlete account.

## 5. View athlete account

If you enter 5, the Show () function will be called, allowing you to view the details of an athlete account.

## 6. View all athletes

If you enter 6, the ShowAll() function will be called, generating a list of all athletes.

## 7. Add sponsor

If you enter 7, the AddSponsor () function will be called, allowing you to add a sponsor to an athlete.

#### 8. Remove sponsor

If you enter 8, the RemoveSponsor () function will be called, allowing you to remove a sponsor from an athlete.

## 9. See all athletes with a sponsor

If you enter 9, the GetSponsorsWithAthlete() function will be called, generating a list of all athletes with a sponsor.

## 10. See all athletes without a sponsor

If you enter 10, the GetSponsorsWithoutAthlete() function will be called, generating a list of all athletes without a sponsor.

#### 11. Add coach

If you enter 11, the AddCoach () function will be called, allowing you to add a coach to an athlete.

#### 12. Remove coach

If you enter 12, the RemoveCoach () function will be called, allowing you to remove a coach from an athlete.

#### 13. See all athletes with a coach

If you enter 13, the GetCoachesWithAthlete() function will be called, generating a list of all athletes with a coach.

#### 14. See all athletes without a coach

If you enter 14, the GetCoachesWithoutAthlete() function will be called, generating a list of all athletes without a coach.

#### 15. Switch club

If you enter 15, the SwitchClub () function will be called, allowing you to switch the club of an athlete.

#### **16. Exit**

If you enter 16, you will exit the Athlete section and return to the User section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Athlete section by entering 16.

## **Sponsor Section**

The Sponsor section is accessed from the User section. This section allows the user to interact with various aspects of a sponsor.

In this section, you will be presented with the following options:

Select section:

- 1. Create sponsor account
- 2. Edit sponsor account
- 3. Search for sponsor account
- 4. Delete sponsor account
- 5. View sponsor account
- 6. View all sponsors
- 7. Switch athlete being sponsored
- 8. Exit

You can navigate through the Sponsor section by entering the number corresponding to your desired operation.

## 1. Create sponsor account

If you enter 1, the CreateAccount () function will be called, allowing you to create a new sponsor account.

## 2. Edit sponsor account

If you enter 2, the EditAccount () function will be called, allowing you to edit an existing sponsor account.

## 3. Search for sponsor account

If you enter 3, the Search () function will be called, allowing you to search for a specific sponsor account.

## 4. Delete sponsor account

If you enter 4, the DeleteAccount () function will be called, allowing you to delete a sponsor account.

## 5. View sponsor account

If you enter 5, the Show () function will be called, allowing you to view the details of a sponsor account.

## 6. View all sponsors

If you enter 6, the ShowAll () function will be called, generating a list of all sponsors.

#### 7. Switch athlete being sponsored

If you enter 7, the SwitchAthlete() function will be called, allowing you to switch the athlete being sponsored by a sponsor.

## 8. Exit

If you enter 8, you will exit the Sponsor section and return to the User section.

If you enter an invalid choice, you will be prompted to try again. This loop will continue until you choose to exit the Sponsor section by entering 8.