

Terminal App: Team Manager Assistant

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```
Welcome to the Team Manager Assistant, before you get underway, there are several questions you must answer.  
What is your first name? Zac  
What is the name of your team? Hoopers
```

```
Welcome Zac, manager of Hoopers
```

```
:::::::::::::::::::: Menu ::::::::::::::::::::::
```

- 1) View Roster
- 2) Add Player
- 3) Remove Player
- 4) Quit

```
What would you like to do?  
Type in the corresponding menu number: █
```

```
# The menu, with header function
```

```
def menu():  
    menu_header('Menu')  
    print(' 1) View Roster \n')  
    print(' 2) Add Player \n')  
    print(' 3) Remove Player \n')  
    print(' 4) Quit \n')
```

```
# A loop made to allow users to select a menu option
```

```
def menu_loop():  
    display_menu = True  
    while display_menu == True:  
        menu()  
        menu_input = input('What would you like to do?\nType in the corresponding menu number: ')  
        if menu_input == '1':  
            menu_header('View Roster')  
            vr.roster_check('view')  
            return_to_menu()  
  
        elif menu_input == '2':  
            menu_header('Add Player')  
            ap.add_player()  
            return_to_menu()  
  
        elif menu_input == '3':  
            menu_header('Remove Player')  
            rp.remove_loop()  
            return_to_menu()  
  
        elif menu_input == '4':  
            print('\nThanks for using the Team Manager Assistant!\n')  
            quit()  
  
        else:  
            print('\nPlease enter a valid menu number. ')
```

```
# Function to format headers for each feature of the project
```

```
def menu_header(text):  
    menu_item = f' {text} '  
    x = menu_item.center(57, ':')  
    print(f'\n{x}\n')
```

```
# Simple loop that allows the user to return to the menu or terminate the program
```

```
def return_to_menu():  
    cont_loop = True  
    while cont_loop:  
        user_input = input('\nWould you like to return to the menu? (y/n): ')  
        if user_input == 'n':  
            print('\nThanks for using the Team Manager Assistant!\n')  
            quit()  
        elif user_input == 'y':  
            return  
        else:  
            print('\nPlease enter either y or n. ')
```

..... Add Player

Would you like to add a new player to the roster? (y/n): y

What is the player's first name?: Michael

What is the player's last name?: Jordan

What is the player's jersey number?: 23

What is the player's phone number?: 0412345678

Would you like to add a new player to the roster? (y/n): y

What is the player's first name?: 55

Only alphabetical characters are allowed.

What is the player's first name?: Kobe

What is the player's last name?: Bryant

What is the player's jersey number?: 24

What is the player's phone number?: 04122334456

Integer entered must be either 8 or 10 digits.

What is the player's phone number?: 0412345679

Would you like to add a new player to the roster? (y/n): n

Would you like to return to the menu? (y/n): y

```
# A loop that contains several functions in order to get accurate information when adding a player.  
# And then saves it to a CSV file.
```

```
def add_player():
```

```
    cont_loop = True
```

```
    while cont_loop == True:
```

```
        user_input = input('Would you like to add a new player to the roster? (y/n): ')
```

```
        if user_input == 'y':
```

```
            first_name = ex.get_a_name("\nWhat is the player's first name?: ")
```

```
            last_name = ex.get_a_name("What is the player's last name?: ")
```

```
            jersey_number = ex.get_a_number("What is the player's jersey number?: ", 1, 2)
```

```
            phone_number = ex.get_a_number("What is the player's phone number?: ", 8, 10)
```

```
            content = [first_name, last_name, jersey_number, phone_number]
```

```
            with open('src/roster.csv', 'a+') as f:
```

```
                writer = csv.writer(f)
```

```
                writer.writerow(content)
```

```
        elif user_input == 'n':
```

```
            cont_loop = False
```

```
            break
```

```
    else:
```

```
        print('\nPlease enter either y or n. \n')
```

```
def alpha_char_check(message):
    variable = str(input(message))
    if not variable.isalpha():
        raise AlphaError('\nOnly alphabetical characters are allowed. \n')
    else:
        return variable.title()
```

```
def get_a_name(message):
    variable = None
    valid_input = False
    while not valid_input:
        try:
            variable = alpha_char_check(message)
            if variable.isalpha():
                return variable
        except AlphaError as err:
            print(err)
        except ValueError:
            print('\nPlease enter a name! (Alphabetical characters only). \n')
        else:
            valid_input = True
            return variable
```

```
def len_num_check(message, val1, val2):
    variable = input(str(message))
    len_count = len(variable)
    while True:
        if not variable.isnumeric():
            raise NumError('\nOnly numerical characters are allowed. \n')
        elif len_count == val1:
            return variable
        elif len_count == val2:
            return variable
        else:
            raise LenError(f'\nInteger entered must be either {val1} or {val2} digits. \n')
```

```
def get_a_number(message, val1, val2):
    variable = None
    valid_input = False
    while not valid_input:
        try:
            variable = len_num_check(message, val1, val2)
        except NumError as num_err:
            print(num_err)
        except LenError as len_err:
            print(len_err)
        except ValueError:
            print('\nPlease enter an integer. \n')
        else:
            valid_input = True
            return variable
```

:::::::::::::::::::: View Roster ::::::::::::::::::::::

:::::::::::::::::::: Hoopers ::::::::::::::::::::::

First Name	Last Name	Jersey Number	Phone Number
Michael	Jordan	23	0412345678
Kobe	Bryant	24	0412345679
LeBron	James	6	0455667788
Nikola	Jokic	15	0488992288
Cheese	McMuffin	12	0397887790

```
def display_roster():
    with open('src/nameteam.csv') as f:
        reader = csv.reader(f)
        reader.__next__()
        for row in reader:
            team = f' {row[1]} '
            x = team.center(57, ':')
            print(x)

    with open('src/roster.csv', 'r') as f:
        mytable = from_csv(f)
        print(mytable)
```

```
def roster_check(filler):
    rowcount = 0

    for row in open('src/roster.csv'):
        rowcount += 1

    if rowcount <= 1:
        print('You need to add players before you can ' + filler + ' the roster! ')
        return
    else:
        display_roster()
```

..... Remove Player

..... Hoopers

First Name	Last Name	Jersey Number	Phone Number
Michael	Jordan	23	0412345678
Kobe	Bryant	24	0412345679
LeBron	James	6	0455667788
Nikola	Jokic	15	0488992288
Cheese	McMuffin	12	0397887790

Do you want to remove a player from the roster? (y/n): y
Enter the first name of the player you would like to remove?: cheese
Are you sure you want to remove Cheese? (y/n): y

Successfully removed Cheese

```
def removal_checker(message):  
    roster = pd.read_csv('src/roster.csv')  
    first_names = roster['First Name']  
    valid_input = False  
    while not valid_input:  
        try:  
            user_input = get_a_name(message)  
            for i in first_names:  
                if user_input == i:  
                    valid_input = True  
                    return user_input  
            else:  
                raise KeyError  
        except KeyError as err:  
            print('\nPlease enter the name of a player on the roster\n')
```

```
def remove_loop():  
    cont_loop = True  
    roster = pd.read_csv('src/roster.csv', index_col='First Name')  
    vr.roster_check('remove players from')  
  
    while cont_loop == True:  
        remove_player_loop = input('\nDo you want to remove a player from the roster? (y/n): ')  
        if remove_player_loop == 'y':  
            user_input = ex.removal_checker('Enter the first name of the player you would like to remove?: ')  
            drop_confirmation = input('Are you sure you want to remove ' + user_input + '? (y/n): ')  
  
            if drop_confirmation == 'y':  
                roster.drop(user_input, axis=0, inplace=True)  
                roster.to_csv('src/roster.csv')  
                print('\nSuccessfully removed ' + user_input + '\n')  
                loop_break = input('Would you like to remove another player? (y/n): ')  
                if loop_break == 'n':  
                    cont_loop = False  
                    break  
  
            elif drop_confirmation == 'n':  
                cont_loop = False  
                break  
  
            else:  
                print('\nPlease enter either y or n. ')  
  
        elif remove_player_loop == 'n':  
            cont_loop = False  
            return  
  
        else:  
            print('\nPlease enter either y or n. ')
```