New Java Project — □ ✕

Create a Java Project
Create a Java project in the workspace or in an external location.

Project name: Zumba_Class_Management_Sys

☑ Use default location

Location: C:\Users\olivi\eclipse-workspace\Zumba_Class_Management_Sys   Browse...

JRE

○ Use an execution environment JRE: JavaSE-17 ⌄

○ Use a project specific JRE: jdk-17.0.3.7-hotspot ⌄

● Use default JRE 'jdk-17.0.3.7-hotspot' and workspace compiler preferences   Configure JREs...

Project layout

○ Use project folder as root for sources and class files

● Create separate folders for sources and class files   Configure default...

Working sets

☐ Add project to working sets   New...

Working sets: ⌄   Select...

Module

☑ Create module-info.java file

? < Back   Next >   Finish   Cancel

- Zumba_Class_Management_Sys
  - src
    - codein
      - batch.java
        - Batch
          - △ day
          - △ hour
          - Batch(int, String, String, long, String, String, String, int)
          - getDay() : String
          - getHour(int) : int
          - toString() : String
      - participant.java
        - Participant
          - △ class_day
          - △ class_hour
          - △ contact_no
          - △ email_id
          - △ first_name
          - △ id
          - △ last_name
          - △ monthlyPaymentStatus
          - Participant(int, String, String, long, String, String, String, int)
          - toString() : String
      - sendEmail.java
        - sendEmail
          - main(String[], String) : void
      - zumbaClassManagementSys.java
        - zumbaClassManagementSys
          - display(ArrayList<Participant>) : void
          - main(String[]) : void
  - JRE System Library [jdk-17.0.3.7-hotspot]
  - Referenced Libraries
    - activation-1.1.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - commons-beanutils-1.9.4.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - commons-collections-3.2.2.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - commons-collections4-4.4.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - commons-lang3-3.12.0.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - commons-logging-1.2.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - commons-text-1.9.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - javax.mail-api-1.5.4.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - joda-time-2.0.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
    - opencsv-5.6.jar - C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot
  - Server Runtime [Apache Tomcat v10.0]
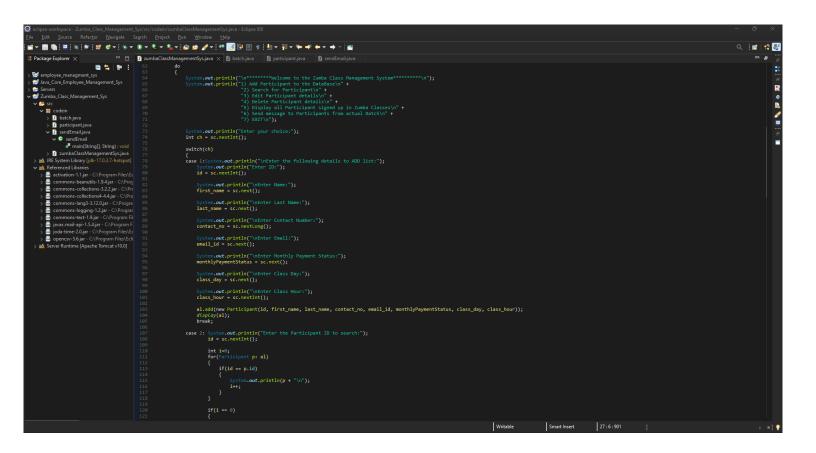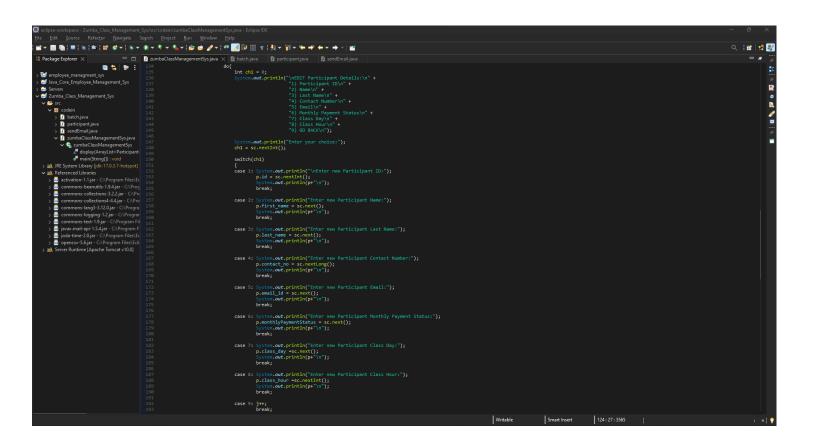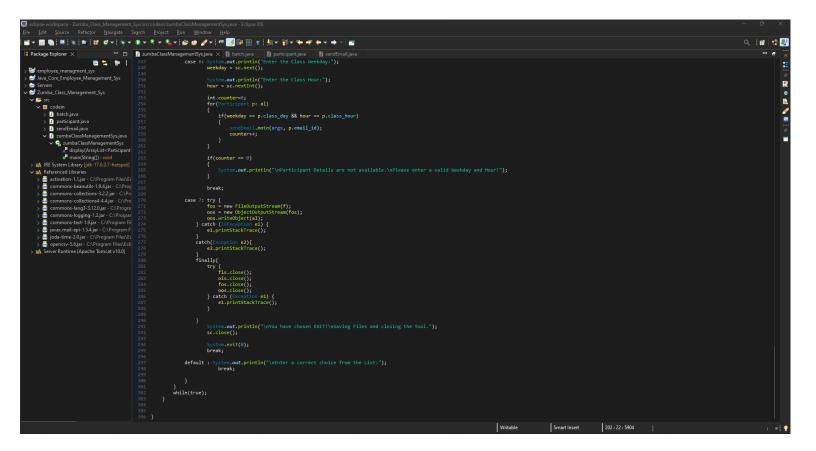
```java
package codein;
import java.io.File;

public class zumbaClassManagementSys
{
    static void display(ArrayList<Participant> al)
    {
        System.out.println("\n-------------Participants List---------------\n");
        System.out.println(String.format("%-10s%-15s%-10s%-20s%-10s", "ID","Name","Last Name","Contact Number",
                           "Email","Monthly Payment Status","Shift"));
        for(Participant p : al)
        {
            System.out.println(String.format("%-5s%-20s%-10s%-15s%-10s", p.id, p.first_name, p.last_name, p.contact_no,
                           p.email_id, p.monthlyPaymentStatus, p.class_day, p.class_hour));
        }
    }

    @SuppressWarnings("unchecked")
    public static void main(String[] args)
    {
        Integer id;
        String first_name;
        String last_name;
        Long contact_no;
        String email_id;
        String monthlyPaymentStatus;
        String class_day;
        Integer class_hour;
        String weekday;
        Integer hour;

        Scanner sc = new Scanner(System.in);

        ArrayList<Participant> al = new ArrayList<Participant>();

        File f = null;
        FileInputStream fis = null;
        ObjectInputStream ois = null;
        FileOutputStream fos = null;
        ObjectOutputStream oos = null;

        try{

            f = new File("C:/Users/olivi/eclipse-workspace/Zumba_Class_Management_Sys/src/ParticipantsDataset.txt");
            fis = new FileInputStream(f);
            ois = new ObjectInputStream(fis);
            al = (ArrayList<Participant>)ois.readObject();


        }
        catch(Exception exp){
            System.out.println(exp);
        }
        do
        {
            System.out.println("\n*********Welcome to the Zumba Class Management System**********\n");
            System.out.println("1) Add Participant to the DataBase\n" +
                               "2) Search for Participant\n" +
                               "3) Edit Participant details\n" +
```

```java
        do
        {
            System.out.println("\n*********Welcome to the Zumba Class Management System**********\n");
            System.out.println("1) Add Participant to the DataBase\n" +
                               "2) Search for Participant\n" +
                               "3) Edit Participant details\n" +
                               "4) Delete Participant details\n" +
                               "5) Display all Participant signed up in Zumba Classes\n" +
                               "6) Send message to Participants from actual Batch\n" +
                               "7) EXIT\n");

            System.out.println("Enter your choice:");
            int ch = sc.nextInt();

            switch(ch)
            {
            case 1:System.out.println("\nEnter the following details to ADD list:");
                System.out.println("Enter ID:");
                id = sc.nextInt();

                System.out.println("\nEnter Name:");
                first_name = sc.next();

                System.out.println("\nEnter Last Name:");
                last_name = sc.next();

                System.out.println("\nEnter Contact Number:");
                contact_no = sc.nextLong();

                System.out.println("\nEnter Email:");
                email_id = sc.next();

                System.out.println("\nEnter Monthly Payment Status:");
                monthlyPaymentStatus = sc.next();

                System.out.println("\nEnter Class Day:");
                class_day = sc.next();

                System.out.println("\nEnter Class Hour:");
                class_hour = sc.nextInt();

                al.add(new Participant(id, first_name, last_name, contact_no, email_id, monthlyPaymentStatus, class_day, class_hour));
                display(al);
                break;

            case 2: System.out.println("Enter the Participant ID to search:");
                id = sc.nextInt();

                int i=0;
                for(Participant p: al)
                {
                    if(id == p.id)
                    {
                        System.out.println(p + "\n");
                        i++;
                    }
                }

                if(i == 0)
                {
```

```java
case 2: System.out.println("Enter the Participant ID to search:");
        id = sc.nextInt();

        int i=0;
        for(Participant p: al)
        {
            if(id == p.id)
            {
                System.out.println(p + "\n");
                i++;
            }
        }

        if(i == 0)
        {
            System.out.println("\nParticipant Details are not available.\nPlease enter a valid ID!");
        }
        break;

case 3: System.out.println("\nEnter the Participant ID to EDIT the details:");
        id = sc.nextInt();
        int j=0;
        for(Participant p: al)
        {
            if(id == p.id)
            {
                j++;
                do{
                    int ch1 = 0;
                    System.out.println("\nEDIT Participant Details:\n" +
                                       "1) Participant ID\n" +
                                       "2) Name\n" +
                                       "3) Last Name\n" +
                                       "4) Contact Number\n" +
                                       "5) Email\n" +
                                       "6) Monthly Payment Status\n" +
                                       "7) Class Day\n" +
                                       "8) Class Hour\n" +
                                       "9) GO BACK\n");

                    System.out.println("Enter your choice:");
                    ch1 = sc.nextInt();

                    switch(ch1)
                    {
                    case 1: System.out.println("\nEnter new Participant ID:");
                            p.id = sc.nextInt();
                            System.out.println(p+"\n");
                            break;

                    case 2: System.out.println("Enter new Participant Name:");
                            p.first_name = sc.next();
                            System.out.println(p+"\n");
                            break;

                    case 3: System.out.println("Enter new Participant Last Name:");
                            p.last_name = sc.next();
                            System.out.println(p+"\n");
                            break;
```

```java
                    do{
                        int ch1 = 0;
                        System.out.println("\nEDIT Participant Details:\n" +
                                           "1) Participant ID\n" +
                                           "2) Name\n" +
                                           "3) Last Name\n" +
                                           "4) Contact Number\n" +
                                           "5) Email\n" +
                                           "6) Monthly Payment Status\n" +
                                           "7) Class Day\n" +
                                           "8) Class Hour\n" +
                                           "9) GO BACK\n");

                        System.out.println("Enter your choice:");
                        ch1 = sc.nextInt();

                        switch(ch1)
                        {
                        case 1: System.out.println("\nEnter new Participant ID:");
                                p.id = sc.nextInt();
                                System.out.println(p+"\n");
                                break;

                        case 2: System.out.println("Enter new Participant Name:");
                                p.first_name = sc.next();
                                System.out.println(p+"\n");
                                break;

                        case 3: System.out.println("Enter new Participant Last Name:");
                                p.last_name = sc.next();
                                System.out.println(p+"\n");
                                break;

                        case 4: System.out.println("Enter new Participant Contact Number:");
                                p.contact_no = sc.nextLong();
                                System.out.println(p+"\n");
                                break;

                        case 5: System.out.println("Enter new Participant Email:");
                                p.email_id = sc.next();
                                System.out.println(p+"\n");
                                break;

                        case 6: System.out.println("Enter new Participant Monthly Payment Status:");
                                p.monthlyPaymentStatus = sc.next();
                                System.out.println(p+"\n");
                                break;

                        case 7: System.out.println("Enter new Participant Class Day:");
                                p.class_day =sc.next();
                                System.out.println(p+"\n");
                                break;

                        case 8: System.out.println("Enter new Participant Class Hour:");
                                p.class_hour =sc.nextInt();
                                System.out.println(p+"\n");
                                break;

                        case 9: j++;
                                break;
```

```java
                    case 9: j++;
                        break;

                    default : System.out.println("\nEnter a correct choice from the List:");
                        break;

                    }
                }
                while(j==1);
            }
            if(j == 0)
            {
                System.out.println("\nParticipant Details are not available.\nPlease enter a valid ID!");
            }

            break;

        case 4: System.out.println("\nEnter Participant ID to DELETE from the Database:");
            id = sc.nextInt();
            int k=0;
            try{
                for(Participant p: al)
                {
                    if(id == p.id)
                    {
                        al.remove(p);
                        display(al);
                        k++;
                    }
                }
                if(k == 0)
                {
                    System.out.println("\nParticipant Details are not available.\nPlease enter a valid ID!");
                }
            }
            catch(Exception ex){
                System.out.println(ex);
            }
            break;

        case 5: try {
                al = (ArrayList<Participant>)ois.readObject();

            } catch (ClassNotFoundException e2) {
                System.out.println(e2);

            } catch (Exception e2) {
                System.out.println(e2);

            }

            display(al);
            break;

        case 6: System.out.println("Enter the Class Weekday:");
            weekday = sc.next();

            System.out.println("Enter the Class Hour:");
            hour = sc.nextInt();
```

```java
        case 6: System.out.println("Enter the Class Weekday:");
            weekday = sc.next();

            System.out.println("Enter the Class Hour:");
            hour = sc.nextInt();

            int counter=0;
            for(Participant p: al)
            {
                if(weekday == p.class_day && hour == p.class_hour)
                {
                    sendEmail.main(args, p.email_id);
                    counter++;
                }
            }

            if(counter == 0)
            {
                System.out.println("\nParticipant Details are not available.\nPlease enter a valid Weekday and Hour!");
            }

            break;

        case 7: try {
                fos = new FileOutputStream(f);
                oos = new ObjectOutputStream(fos);
                oos.writeObject(al);
            } catch (IOException e1) {
                e1.printStackTrace();
            }
            catch(Exception e2){
                e2.printStackTrace();
            }
            finally{
                try {
                    fis.close();
                    ois.close();
                    fos.close();
                    oos.close();
                } catch (Exception e1) {
                    e1.printStackTrace();
                }

            }

            System.out.println("\nYou have chosen EXIT!\nSaving Files and closing the tool.");
            sc.close();

            System.exit(0);
            break;

        default : System.out.println("\nEnter a correct choice from the List:");
                break;

            }
        }
        while(true);
    }
}
```

participant.java

```java
package codein;
import java.io.Serializable;

@SuppressWarnings("serial")
class Participant implements Serializable{

    int id;
    String first_name;
    String last_name;
    long contact_no;
    String email_id;
    String monthlyPaymentStatus;
    String class_day;
    int class_hour;

    public Participant(int id, String first_name, String last_name, long contact_no, String email_id, String monthlyPaymentStatus, String class_day, int class_hour)
    {
        this.id = id;
        this.first_name = first_name;
        this.last_name = last_name;
        this.contact_no = contact_no;
        this.email_id = email_id;
        this.monthlyPaymentStatus = monthlyPaymentStatus;
        this.class_day = class_day;
        this.class_hour = class_hour;
    }

    public String toString()
    {
        return "\nParticipant Details:" + "\nID: " + this.id + "\nName: " + this.first_name + "\nLast Name: " + this.last_name
                + "\nContact Number: " + this.contact_no + "\nEmail: " + this.email_id + "\nMonthly Payment Status: " + this.monthlyPaymentStatus
                + "\nClass Day: " + this.class_day + "\nClass Hour: " + this.class_hour;
    }

}
```

batch.java

```java
package codein;
import java.io.Serializable;

@SuppressWarnings("serial")
class Batch extends Participant implements Serializable{

    String day;
    int hour;

    public Batch(int id, String first_name, String last_name, long contact_no, String email_id, String monthlyPaymentStatus, String day, int hour)
    {
        super(id, first_name, last_name, contact_no, email_id, monthlyPaymentStatus, day, hour);
        this.day = day;
        this.hour = hour;
    }

    public String getDay()
    {
        return day;
    }

    public int getHour(int hour)
    {
        return hour;
    }

    public String toString()
    {
        return "\nBatch Details:" + "\nShift:" + this.day + "\nHour:" + this.hour;
    }
}
```

First screenshot — `sendEmail.java`:

```java
package codein;
import java.util.Properties;
import javax.mail.Message;
import javax.mail.MessagingException;
import javax.mail.Session;
import javax.mail.Transport;
import javax.mail.internet.InternetAddress;
import javax.mail.internet.MimeMessage;

public class sendEmail {

    public static void main(String [] args, String email_id) {
        // Recipient's email ID needs to be mentioned.
        String to = email_id;

        // Sender's email ID needs to be mentioned
        String from = "teacher_yasmin@gmail.com";

        // Assuming you are sending email from localhost
        String host = "localhost";

        // Get system properties
        Properties properties = System.getProperties();

        // Setup mail server
        properties.setProperty("mail.smtp.host", host);

        // Get the default Session object.
        Session session = Session.getDefaultInstance(properties);

        try {
            // Create a default MimeMessage object.
            MimeMessage message = new MimeMessage(session);

            // Set From: header field of the header.
            message.setFrom(new InternetAddress(from));

            // Set To: header field of the header.
            message.addRecipient(Message.RecipientType.TO, new InternetAddress(to));

            // Set Subject: header field
            message.setSubject("Zumba Class Remainder");

            // Now set the actual message
            message.setText("Your Zumba Class is about to begin!");

            // Send message
            Transport.send(message);
            System.out.println("Sent message successfully...");
        } catch (MessagingException mex) {
            mex.printStackTrace();
        }
    }
}
```

Second screenshot — `zumbaClassManagementSys.java` with console output:

```java
            "3) Edit Parti
            "4) Delete Par
            "5) Display al
            "6) Send messa
            "7) EXIT\n");
System.out.println("Enter your cho
int ch = sc.nextInt();

switch(ch)
{
case 1:System.out.println("\nEnter
    System.out.println("Enter ID:"
    id = sc.nextInt();

    System.out.println("\nEnter Na
    first_name = sc.next();

    System.out.println("\nEnter La
    last_name = sc.next();

    System.out.println("\nEnter Co
    contact_no = sc.nextLong();

    System.out.println("\nEnter Em
    email_id = sc.next();

    System.out.println("\nEnter Mo
    monthlyPaymentStatus = sc.next

    System.out.println("\nEnter Cl
    class_day = sc.next();

    System.out.println("\nEnter Cl
    class_hour = sc.nextInt();

    al.add(new Participant(id, fir
    display(al);
    break;

case 2: System.out.println("Enter
    id = sc.nextInt();

    int i=0;
    for(Participant p: al)
    {
        if(id == p.id)
        {
            System.out.println
            i++;
        }
    }

    if(i == 0)
    {
        System.out.println("\n
    }
    break;

case 3: System.out.println("\nEnter the Participant ID to EDIT the details:");
```

Console output:

```
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
1

Enter the following details to ADD list:
Enter ID:
3

Enter Name:
Caio

Enter Last Name:
Madeira

Enter Contact Number:
5521987625223

Enter Email:
caio.madeira@outlook.com

Enter Monthly Payment Status:
PAID

Enter Class Day:
Tuesday

Enter Class Hour:
12

--------------Participants List--------------
ID      Name        Last Name  Contact Number   Email
1       Ivan        Oliveira   5521981901629    olivivan@gmail.com
2       Lucy        Liu        45678987654      lucyliu@kungfu.com
3       Caio        Madeira    5521987625223    caio.madeira@outlook.com

*********Welcome to the Zumba Class Management System**********

1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
```

zumbaClassManagementSys.java   batch.java   par

```java
            "3) Edit Parti
            "4) Delete Par
            "5) Display al
            "6) Send messa
            "7) EXIT\n");

        System.out.println("Enter your cho
        int ch = sc.nextInt();

        switch(ch)
        {
        case 1:System.out.println("\nEnter
            System.out.println("Enter ID:
            id = sc.nextInt();

            System.out.println("\nEnter Na
            first_name = sc.next();

            System.out.println("\nEnter La
            last_name = sc.next();

            System.out.println("\nEnter Co
            contact_no = sc.nextLong();

            System.out.println("\nEnter Em
            email_id = sc.next();

            System.out.println("\nEnter Mo
            monthlyPaymentStatus = sc.next

            System.out.println("\nEnter Cl
            class_day = sc.next();

            System.out.println("\nEnter Cl
            class_hour = sc.nextInt();

            al.add(new Participant(id, fir
            display(al);
            break;

        case 2: System.out.println("Enter
            id = sc.nextInt();

            int i=0;
            for(Participant p: al)
            {
                if(id == p.id)
                {
                    System.out.println
                    i++;
                }
            }

            if(i == 0)
            {
                System.out.println("\n

            }
            break;

        case 3: System.out.println("\nEnter the Participant ID to EDIT the details:");
```

```
Enter Monthly Payment Status:
PAID
Enter Class Day:
Tuesday
Enter Class Hour:
12

--------------Participants List--------------
ID    Name      Last Name   Contact Number   Email
1     Ivan      Oliveira    5521981901629    olivivan@gmail.com
2     Lucy      Liu         45678987654      lucyliu@kungfu.com
3     Caio      Madeira     5521987625223    caio.madeira@outlook.com

*********Welcome to the Zumba Class Management System*********
1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
Enter the Participant ID to search:
2

Participant Details:
ID: 2
Name: Lucy
Last Name: Liu
Contact Number: 45678987654
Email: lucyliu@kungfu.com
Monthly Payment Status: PAID
Class Day: Monday
Class Hour: 12

*********Welcome to the Zumba Class Management System*********
1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
```

---

zumbaClassManagementSys.java   batch.java   par

```java
            "3) Edit Parti
            "4) Delete Par
            "5) Display al
            "6) Send messa
            "7) EXIT\n");

        System.out.println("Enter your cho
        int ch = sc.nextInt();

        switch(ch)
        {
        case 1:System.out.println("\nEnter
            System.out.println("Enter ID:
            id = sc.nextInt();

            System.out.println("\nEnter Na
            first_name = sc.next();

            System.out.println("\nEnter La
            last_name = sc.next();

            System.out.println("\nEnter Co
            contact_no = sc.nextLong();

            System.out.println("\nEnter Em
            email_id = sc.next();

            System.out.println("\nEnter Mo
            monthlyPaymentStatus = sc.next

            System.out.println("\nEnter Cl
            class_day = sc.next();

            System.out.println("\nEnter Cl
            class_hour = sc.nextInt();

            al.add(new Participant(id, fir
            display(al);
            break;

        case 2: System.out.println("Enter
            id = sc.nextInt();

            int i=0;
            for(Participant p: al)
            {
                if(id == p.id)
                {
                    System.out.println
                    i++;
                }
            }

            if(i == 0)
            {
                System.out.println("\n

            }
            break;

        case 3: System.out.println("\nEnter the Participant ID to EDIT the details:");
```

```
1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
3

Enter the Participant ID to EDIT the details:
3

EDIT Participant Details:
1) Participant ID
2) Name
3) Last Name
4) Contact Number
5) Email
6) Monthly Payment Status
7) Class Day
8) Class Hour
9) GO BACK

Enter your choice:
4
Enter new Participant Contact Number:
5521981904423

Participant Details:
ID: 3
Name: Caio
Last Name: Madeira
Contact Number: 5521981904423
Email: caio.madeira@outlook.com
Monthly Payment Status: PAID
Class Day: Tuesday
Class Hour: 12

EDIT Participant Details:
1) Participant ID
2) Name
3) Last Name
4) Contact Number
5) Email
6) Monthly Payment Status
7) Class Day
8) Class Hour
9) GO BACK

Enter your choice:
```

Screenshot 1 — Eclipse IDE code editor:

```
"3) Edit Parti
"4) Delete Par
"5) Display al
"6) Send messa
"7) EXIT\n");

System.out.println("Enter your cho
int ch = sc.nextInt();

switch(ch)
{
case 1:System.out.println("\nEnter
    System.out.println("Enter  ID:"
    id = sc.nextInt();

    System.out.println("\nEnter Na
    first_name = sc.next();

    System.out.println("\nEnter La
    last_name = sc.next();

    System.out.println("\nEnter Co
    contact_no = sc.nextLong();

    System.out.println("\nEnter Em
    email_id = sc.next();

    System.out.println("\nEnter Mo
    monthlyPaymentStatus = sc.next

    System.out.println("\nEnter Cl
    class_day = sc.next();

    System.out.println("\nEnter Cl
    class_hour = sc.nextInt();

    al.add(new Participant(id, fir
    display(al);
    break;

case 2: System.out.println("Enter
    id = sc.nextInt();

    int i=0;
    for(Participant p: al)
    {
        if(id == p.id)
        {
            System.out.println
            i++;
        }
    }

    if(i == 0)
    {
        System.out.println("\n
    }
    break;

case 3: System.out.println("\nEnter the Participant ID to EDIT the details:");
```

Console output:

```
zumbaClassManagementSys [Java Application] C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot\bin\javaw.exe (Aug 31, 2022, 1:05:45 PM)
*********Welcome to the Zumba Class Management System**********

1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
5
java.io.EOFException

--------------Participants List--------------

ID    Name         Last Name  Contact Number    Email
1     Ivan         Oliveira   5521981901629     olivivan@gmail.com
2     Lucy         Liu        45678987654       lucyliu@kungfu.com

*********Welcome to the Zumba Class Management System**********

1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
```


Screenshot 2 — Eclipse IDE code editor:

```
1  package codein;
2  import java.io.File;
10
11 public class zumbaClassManagementSys
12 {
13     static void display(ArrayList<Participant
14     {
15         System.out.println("\n--------------Pi
16         System.out.println(String.format("%-10
17                 "Email","Monthly
18         for(Participant p : al)
19         {
20             System.out.println(String.format(
21                     p.email_id, p
22         }
23     }
24
25     @SuppressWarnings("unchecked")
26     public static void main(String[] args)
27     {
28         Integer id;
29         String first_name;
30         String last_name;
31         Long contact_no;
32         String email_id;
33         String monthlyPaymentStatus;
34         String class_day;
35         Integer class_hour;
36         String weekday;
37         Integer hour;
38
39
40         Scanner sc = new Scanner(System.in);
41
42         ArrayList<Participant> al = new ArrayL
43
44         File f = null;
45         FileInputStream fis = null;
46         ObjectInputStream ois = null;
47         FileOutputStream fos = null;
48         ObjectOutputStream oos = null;
49
50         try{
51
52             f = new File("C:/Users/olivi/ecli
53             fis = new FileInputStream(f);
54             ois = new ObjectInputStream(fis);
55             al = (ArrayList<Participant>)ois.
56
57
58         }
59         catch(Exception exp){
60             System.out.println(exp);
61         }
62         do
63         {
64             System.out.println("\n*********Welcome to the Zumba Class Management System*********\n");
65             System.out.println("1) Add Participant to the DataBase\n" +
66                     "2) Search for Participant\n" +
67                     "3) Edit Participant details\n" +
```

Console output:

```
zumbaClassManagementSys [Java Application] C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot\bin\javaw.exe (Aug 31, 2022, 2:08:04 PM)
*********Welcome to the Zumba Class Management System**********

1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
6
Enter the Class Weekday:
Friday
Enter the Class Hour:
12

Participant Details are not available.
Please enter a valid Weekday and Hour!

*********Welcome to the Zumba Class Management System**********

1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
5
java.io.EOFException

--------------Participants List--------------

ID    Name         Last Name  Contact Number    Email
1     Ivan         Oliveira   5521981901629     olivivan@gmail.com
2     Lucy         Liu        45678987654       lucyliu@kungfu.com
3     Mahatma      Gandhi     231342675673      mahatma@gandhidi.com

*********Welcome to the Zumba Class Management System**********

1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
```

eclipse-workspace - Zumba_Class_Management_Sys/src/codein/zumbaClassManagementSys.java - Eclipse IDE

File   Edit   Source   Refactor   Navigate   Search   Project   Run   Window   Help

Package Explorer

- employee_managment_sys
- Java_Core_Employee_Management_Sys
- Servers
- Zumba_Class_Management_Sys
  - src
    - codein
      - batch.java
      - participant.java
      - sendEmail.java
      - zumbaClassManagementSys.java
        - zumbaClassManagementSys
          - display(ArrayList<Participant>
          - main(String[]) : void
  - JRE System Library [jdk-17.0.3.7-hotspot]
  - Referenced Libraries
    - activation-1.1.jar - C:\Program Files\Ecl
    - commons-beanutils-1.9.4.jar - C:\Progr
    - commons-collections-3.2.2.jar - C:\Pro
    - commons-collections4-4.4.jar - C:\Prog
    - commons-lang3-3.12.0.jar - C:\Program
    - commons-logging-1.2.jar - C:\Program
    - commons-text-1.9.jar - C:\Program File
    - javax.mail-api-1.5.4.jar - C:\Program Fil
    - joda-time-2.0.jar - C:\Program Files\Ecl
    - opencsv-5.6.jar - C:\Program Files\Eclip
  - Server Runtime [Apache Tomcat v10.0]

zumbaClassManagementSys.java   batch.java   pa   Problems   Javadoc   Declaration   Search   Console

```java
1  package codein;
20 import java.io.File;
10
11 public class zumbaClassManagementSys
12 {
13     static void display(ArrayList<Participant
14     {
15         System.out.println("\n-------------P
16         System.out.println(String.format("%-16
17                         "Email","Monthly
18         for(Participant p : al)
19         {
20             System.out.println(String.format(
21                         p.email_id, p
22         }
23     }
24
25     @SuppressWarnings("unchecked")
26     public static void main(String[] args)
27     {
28         Integer id;
29         String first_name;
30         String last_name;
31         Long contact_no;
32         String email_id;
33         String monthlyPaymentStatus;
34         String class_day;
35         Integer class_hour;
36         String weekday;
37         Integer hour;
38
39
40         Scanner sc = new Scanner(System.in);
41
42         ArrayList<Participant> al = new ArrayL
43
44         File f = null;
45         FileInputStream fis = null;
46         ObjectInputStream ois = null;
47         FileOutputStream fos = null;
48         ObjectOutputStream oos = null;
49
50         try{
51
52             f = new File("C:/Users/olivi/ecli
53             fis = new FileInputStream(f);
54             ois = new ObjectInputStream(fis);
55             al = (ArrayList<Participant>)ois.r
56
57         }
58         catch(Exception exp){
59             System.out.println(exp);
60         }
61         do
62         {
63             System.out.println("\n*********Welcome to the Zumba Class Management System*********\n");
64             System.out.println("1) Add Participant to the DataBase\n" +
65                         "2) Search for Participant\n" +
66                         "3) Edit Participant details\n" +
67
```

<terminated> zumbaClassManagementSys [Java Application] C:\Program Files\Eclipse Adoptium\jdk-17.0.3.7-hotspot\bin\javaw.exe (Aug 31, 2022, 2:03:32 PM – 2:05:45 PM)

```
Class Hour: 12

EDIT Participant Details:
1) Participant ID
2) Name
3) Last Name
4) Contact Number
5) Email
6) Monthly Payment Status
7) Class Day
8) Class Hour
9) GO BACK

Enter your choice:
9

*********Welcome to the Zumba Class Management System*********

1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
5
java.io.EOFException

--------------Participants List--------------
ID      Name        Last Name Contact Number    Email
1       Ivan        Oliveira  5521981901629     olivivan@gmail.com
2       Lucy        Liu       45678987654       lucyliu@kungfu.com
3       Mahatma     Gandhi    231342675673      mahatma@gandhidi.com

*********Welcome to the Zumba Class Management System*********

1) Add Participant to the DataBase
2) Search for Participant
3) Edit Participant details
4) Delete Participant details
5) Display all Participant signed up in Zumba Classes
6) Send message to Participants from actual Batch
7) EXIT

Enter your choice:
7

You have chosen EXIT!
Saving Files and closing the tool.
```