South Carolina Sleepaway Camp Design Document

System Overview

The purpose of this system is to provide an easy way for users, including: administrators, counselors, and customers, to be able to navigate through all the resources and information of the camp. The environment of this program will be a java program on an individual computer.

References

- CSCE 247 Requirements - Requirements document
- Camp Project Requirements - Detailed project requirements

Environment Overview

This system will be downloaded and run on a single machine and can be executed using java. The program will get input through the console.

User Interface

Opening Screen-

Welcome to our Camp System

1. Guardian Login

2. Counselor Login

3. Director Login

4. Create account

User Login-

Enter Username: JoeRandom23

Enter Password: password

Guardian options-

1. register child

2. edit child information

Register child-

What would you like to do?: 1

Enter your child’s first name: Joe

Enter your child’s last name: Random

Enter your child’s age: 12

Enter the session you want to enter: Color Week

Enter your child’s emergency contact’s name: Mo Random

Enter the relationship of your child's emergency contact: Mom

Enter the phone number of your child's emergency contact: 123-456-7860

Enter your health insurance company: Blue Cross

Enter your insurance policy number: 12

Enter your child’s doctor: Doctor Frank

Enter any of your child’s allergies, or “none” if not applicable: none

Enter your child’s medications or “none” if not applicable: none

Edit child information

What would you like to do?: 2

What information would you like to edit: age

Enter your child’s age: 13

Counselor Options

1. View Schedule

2. View Campers

3. Edit Personal Information

View Schedule-

What would you like to do? : 1

What day would you like to view? Or enter all to view entire schedule: Monday

Mon

9-930 Breakfast

10-11 Archery

11-12 Basketball

12-1230 Lunch

1-2 Crafts

2-3 Water

3-6 Free time

6-7 Dinner

7-8 Campfire

830 Bed

View Campers-

What would you like to do? : 2

Tommy Johnston

Bill Tompson

Tom Billson

Jimmy James

Walter White

Craig Third

Joe Johnson

Edit Personal information-

What would you like to do?: 3

What information would you like to edit?: Allergies

Add a new allergy: eggs

Is that all?: no

Add a new allergy: fish

Is that all?: yes

Director Options-

1. Add an activity

2. Remove an activity

3. Edit Schedule

Add an activity-

What would you like to do?: 1

Enter the activity name: Water skiing

Enter the activity description: Hour of fun on the lake learning how to water ski. Any level is welcome.

Activity Added.

Remove an activity-

What would you like to do?: 2

Enter the activity name: Croquet

Activity Removed.

Edit Schedule-

What would you like to do?: 3

What counselors schedule will you edit?: Joe Thornton

Enter the name of the activity to add: Bocce

Enter the timeslot of the activity: 2-3

Schedule Edited.

Create an account-

Enter the counselor or director code if you were given, enter none if you are a guardian: none

Enter your name: Tom Tomson

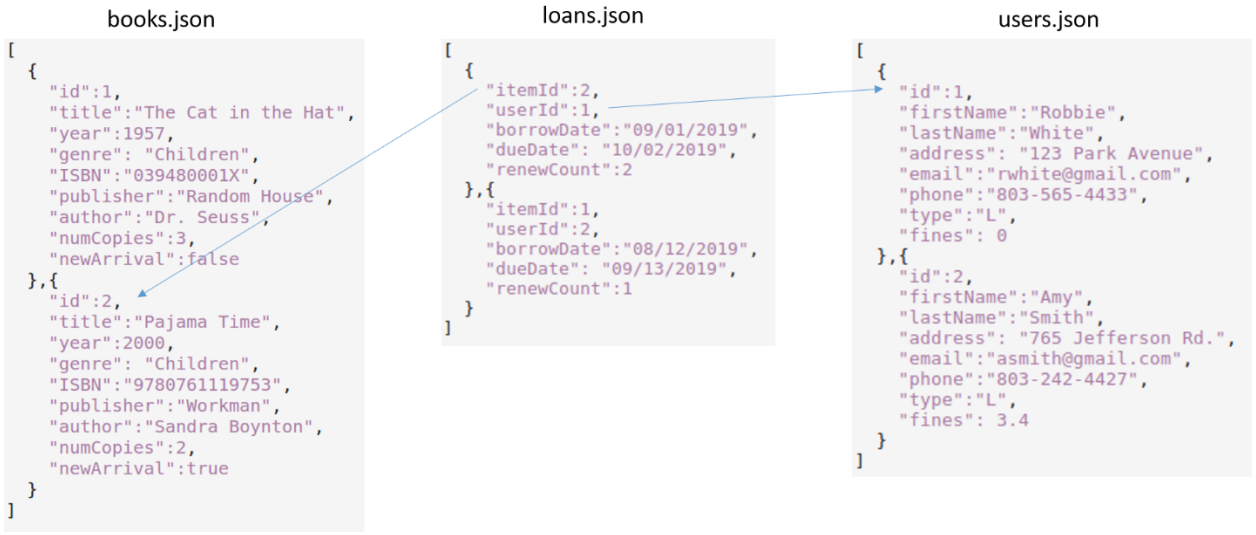
Enter your username: TTom72

Enter your password: Ilovemykid123

Account successfully created.

Data Storage

The data will be stored in two json files: child.json and sessions.json. Each json file holds an array of objects which contain information pertaining to the json file's title. The child is connected to the sessions by providing the information of a child to a specific session that way the child is then registered to that session.



child.json:

Session 1


```
[
 {"firstName":"Josh",
  "lastName":"Huger",
  "id":"123456789",
  "age":"11",
  "session":"Session 1",
  "deitaryRestrictions":"Corn",
  "allergies":"Corn",
  "medications":"None"},

 {"firstName":"Darrell",
  "lastName":"Jones",
  "id":"123456788",
  "age":"12",
  "session":"Session 1",
  "deitaryRestrictions":"Peanut foods",
  "allergies":"Peanuts",
  "medications":"Epi-Pen"},

  {"firstName":"Jack",
   "lastName":"Kole",
   "id":"123456787",
   "age":"13",
   "session":"Session 1",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"{firstName":"Amy",
   "lastName":"Grasshopper",
   "id":"123456786",
   "age":"14",
   "session":"Session 1",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Jill",
   "lastName":"Smith",
   "id":"123456785",
   "age":"15",
   "session":"Session 1",
   "deitaryRestrictions":"Seafood",
   "allergies":"Shellfish",
   "medications":"Epi-Pen"},
```

```
  {"firstName":"Rebecca",
   "lastName":"Ronald",
   "id":"123456784",
   "age":"15",
   "session":"Session 1",
   "deitaryRestrictions":"Seafood",
   "allergies":"Shellfish",
   "medications":"Epi-Pen"},

  {"firstName":"Kasey",
   "lastName":"Johnson",
   "id":"123456783",
   "age":"16",
   "session":"Session 1",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Alex",
   "lastName":"Adams",
   "id":"123456782",
   "age":"17",
   "session":"Session 1",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"}
]
```


Session 2

```
[
 {"firstName":"Jeremy",
  "lastName":"Owens",
  "id":"123456781",
  "age":"11",
  "session":"Session 2",
  "deitaryRestrictions":"None",
  "allergies":"None",
  "medications":"None"},

 {"firstName":"Thomas",
  "lastName":"Crocker",
  "id":"123456780",
  "age":"12",
  "session":"Session 2",
  "deitaryRestrictions":"Gluten",
  "allergies":"Gluten",
  "medications":"None"},

  {"firstName":"Edison",
   "lastName":"Thomas",
   "id":"123456779",
   "age":"13",
   "session":"Session 2",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"{firstName":"Carson",
   "lastName":"Wentz",
   "id":"123456778",
   "age":"14",
   "session":"Session 2",
   "deitaryRestrictions":"Diabetes",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Daisy",
   "lastName":"Rogers",
   "id":"123456777",
   "age":"15",
   "session":"Session 2",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},
```

```
  {"firstName":"Cedrick",
   "lastName":"Highsmif",
   "id":"123456776",
   "age":"15",
   "session":"Session 2",
   "deitaryRestrictions":"Gluten",
   "allergies":"Tree nuts",
   "medications":"Epi-Pen"},

  {"firstName":"Kevin",
   "lastName":"Stark",
   "id":"123456775",
   "age":"16",
   "session":"Session 2",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Hussein",
   "lastName":"Hamid",
   "id":"123456774",
   "age":"17",
   "session":"Session 2",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"}
]
```


Session 3

```
[
 {"firstName":"Oscar",
  "lastName":"Cannister",
  "id":"123456773",
  "age":"11",
  "session":"Session 3",
  "deitaryRestrictions":"None",
  "allergies":"None",
  "medications":"None"},

 {"firstName":"Jagger",
  "lastName":"Attkison",
  "id":"123456772",
  "age":"12",
  "session":"Session 3",
  "deitaryRestrictions":"Gluten",
  "allergies":"Gluten",
  "medications":"None"},

  {"firstName":"Jerry",
   "lastName":"Seinfeld",
   "id":"123456771",
   "age":"13",
   "session":"Session 3",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"{firstName":"Deep",
   "lastName":"Patel",
   "id":"123456770",
   "age":"14",
   "session":"Session 3",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Mercedes",
   "lastName":"Tillup",
   "id":"123456769",
   "age":"15",
   "session":"Session 3",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

```

```
  {"firstName":"Jacob",
   "lastName":"Sutton",
   "id":"123456768",
   "age":"15",
   "session":"Session 3",
   "deitaryRestrictions":"Gluten",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Austin",
   "lastName":"Clark",
   "id":"123456767",
   "age":"16",
   "session":"Session 3",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Jafet",
   "lastName":"Rios",
   "id":"123456766",
   "age":"17",
   "session":"Session 3",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"}
]
```

Session 4

```
[
 {"firstName":"Terry",
  "lastName":"Scary",
  "id":"123456765",
  "age":"11",
  "session":"Session 4",
  "deitaryRestrictions":"None",
  "allergies":"None",
  "medications":"None"},

 {"firstName":"Matthew",
  "lastName":"Shaheen",
  "id":"123456764",
  "age":"12",
  "session":"Session 4",
  "deitaryRestrictions":"Gluten",
  "allergies":"Gluten",
  "medications":"None"},

  {"firstName":"Joe",
   "lastName":"Shiesty",
   "id":"123456763",
   "age":"13",
   "session":"Session 4",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"{firstName":"Norman",
   "lastName":"Cella",
   "id":"123456762",
   "age":"14",
   "session":"Session 4",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Emma",
   "lastName":"Granger",
   "id":"123456761",
   "age":"15",
   "session":"Session 4",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},
```

```
  {"firstName":"Marquise",
   "lastName":"Brown",
   "id":"123456760",
   "age":"15",
   "session":"Session 4",
   "deitaryRestrictions":"Gluten",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Kate",
   "lastName":"Moore",
   "id":"123456759",
   "age":"16",
   "session":"Session 4",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"},

  {"firstName":"Miller",
   "lastName":"Amendola",
   "id":"123456758",
   "age":"17",
   "session":"Session 4",
   "deitaryRestrictions":"None",
   "allergies":"None",
   "medications":"None"}
]
```

emergencyContact.json:

```
[
 {"emergencyContact":"Karen Huger, Mother, 843-832-8881",
  "id":"123456789"},

 {"emergencyContact":"Martha Jones, Mother, 414-591-0092",
  "id":"123456788"},

 {"emergencyContact":"Oliver Kole, Father, 341-209-3432",
  "id":"123456787"},

 {"emergencyContact":"Thomas Grasshopper, Father, 212-323-1232",
  "id":"123456786"},

 {"emergencyContact":"Thomas Smith, Father, 484-583-9090",
  "id":"123456785"},

 {"emergencyContact":"Thomas Smith, Father, 484-583-9090",
  "id":"123456784"},

 {"emergencyContact":"Cameron Johnson, Mother, 215-616-1987",
  "id":"123456783"},

 {"emergencyContact":"Ryan Adams, Father, 843-343-7425",
  "id":"123456782"},

 {"emergencyContact":"Paula Owens, Mother, 323-232-4754",
  "id":"123456781"},

 {"emergencyContact":"Sadie Crocker, Mother, 803-123-4754",
  "id":"123456780"},

 {"emergencyContact":"Margot Thomas, Grandmother, 758-901-8423",
  "id":"123456779"},

 {"emergencyContact":"Tony Wentz, Father, 753-900-0234",
  "id":"123456778"},

 {"emergencyContact":"Ricky Rogers, Father, 234-4575-8345",
  "id":"123456777"},

 {"emergencyContact":"Gregory Highsmif, Father, 233-676-6834",
  "id":"123456776"},

 {"emergencyContact":"Patrick Stark, Guardian, 546-634-3284",
  "id":"123456775"},

 {"emergencyContact":"Raza Hamid, Father, 323-634-9348",
  "id":"123456774"},

 {"emergencyContact":"Courtney Cannister, Mother, 647-343-8482",
  "id":"123456773"},
```

```
{"emergencyContact":"Jules Attkison, Mother, 803-234-6839",
 "id":"123456772"},

{"emergencyContact":"Kate Seinfeld, Mother, 843-234-3468",
 "id":"123456771"},

{"emergencyContact":"Prashant Patel, Father, 753-234-2346",
 "id":"123456770"},

{"emergencyContact":"Roger Tillup, Father, 234-567-8490",
 "id":"123456769"},

{"emergencyContact":"Jorge Sutton, Father, 495-839-5234",
 "id":"123456768"},

{"emergencyContact":"Pat Clark, Father, 460-454-3345",
 "id":"123456767"},

{"emergencyContact":"Patricia Rios, Mother, 346-565-3453",
 "id":"123456766"},

{"emergencyContact":"Jamie scary, Mother, 234-784-6578",
 "id":"123456765"},

{"emergencyContact":"Sydney Shaheen, Mother, 823-412-5464",
 "id":"123456764"},

{"emergencyContact":"Pooh Shiesty, Father, 843-234-6435",
 "id":"123456763"},

{"emergencyContact":"Hannah Cella, Mother, 344-540-9012",
 "id":"123456762"},

{"emergencyContact":"Ellis Granger, Father, 342-698-4389",
 "id":"123456761"},

{"emergencyContact":"AJ Brown, Father, 348-569-0005",
 "id":"123456760"},

{"emergencyContact":"Ronald Moore, Father, 345-536-9849",
 "id":"123456759"},

{"emergencyContact":"Heather Amendola, Mother, 095-345-6094",
 "id":"123456758"}
```


healthInfo.json:

```
[
{"healthCare":"Medicaid, TXF343243244, Dr. Henley",
 "id":"123456789"},

{"healthCare":"BlueCross BlueShield, 456382922, Dr. Herbert",
 "id":"123456788"},

{"healthCare":"ObamaCare, 34322930, Dr. Elephant",
 "id":"123456787"},

{"healthCare":"None, 000, Dr. Zach",
 "id":"123456786"},

{"healthCare":"InsuranceCare, G38348222, Dr. Gary",
 "id":"123456785"},

{"healthCare":"InsuranceCare, G2434243, Dr. Bortles",
 "id":"123456784"},

{"healthCare":"Medicaid, F1232359, Dr. Thompson",
 "id":"123456783"},

{"healthCare":"HealthForU, 3393498345, Dr. Freddy",
 "id":"123456782"},

{"healthCare":"AffordableHealthCare, 3432432342, Dr. Colby",
 "id":"123456781"},

{"healthCare":"AffordableHealthCare, 23234215, Dr. Chanel",
 "id":"123456780"},

{"healthCare":"InsuranceForU, HY324324212329, Dr. Henderson",
 "id":"123456779"},

{"healthCare":"FederalHealth, F234342, Dr. Commander",
 "id":"123456778"},

{"healthCare":"Gary'sInsurance, FFRFNK34, Dr. Simons",
 "id":"123456777"},

{"healthCare":"ObamaCare, 90903039503490909364134, Dr. Stamps",
 "id":"123456776"},

{"healthCare":"BlueCross BlueShield, 234324234, Dr. Faulkner",
 "id":"123456775"},

{"healthCare":"Medicare, 324234, Dr. Stanley",
 "id":"123456774"},

{"healthCare":"AffordableHealthCare, 3453895, Dr. Snow",
 "id":"123456773"},
```

```
{"healthCare":"AffordableHealthCare, G23242, Dr. George",
 "id":"123456772"},

{"healthCare":"InsuranceForU, 246546456, Dr. Smiley",
 "id":"123456771"},

{"healthCare":"FederalHealth, 3453453145, Dr. Issac",
 "id":"123456770"},

{"healthCare":"Gary'sInsurance, 25323597607, Dr. Smith",
 "id":"123456769"},

{"healthCare":"ObamaCare, 9398938453453453, Dr. Tyler",
 "id":"123456768"},

{"healthCare":"BlueCross BlueShield, 35345, Dr. Kyler",
 "id":"123456767"},

{"healthCare":"Medicare, 234595656460, Dr. Hatoff",
 "id":"123456766"},

{"healthCare":"AffordableHealthCare, 37348, Dr. Towns",
 "id":"123456765"},

{"healthCare":"AffordableHealthCare, H393854395839453, Dr. Lacy",
 "id":"123456764"},

{"healthCare":"InsuranceForU, G234235785535, Dr. Margallia",
 "id":"123456763"},

{"healthCare":"FederalHealth, FFF2342349845045, Dr. Mostert",
 "id":"123456762"},

{"healthCare":"Gary'sInsurance, 3495843, Dr. Gary",
 "id":"123456761"},

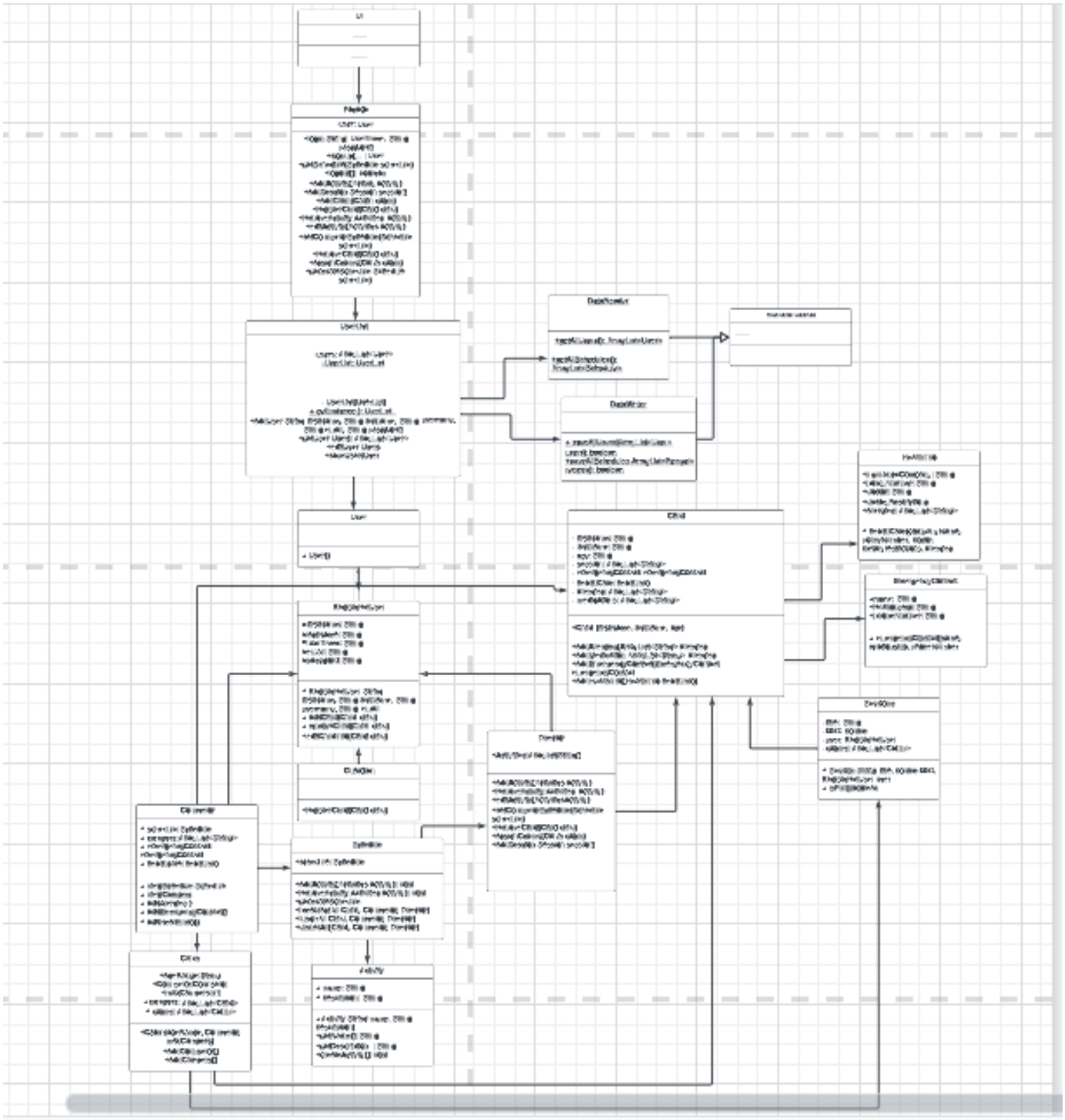
{"healthCare":"ObamaCare, 39348579GG4, Dr. Ferdanand",
 "id":"123456760"},

{"healthCare":"BlueCross BlueShield, HHH53243535345, Dr. John",
 "id":"123456759"},

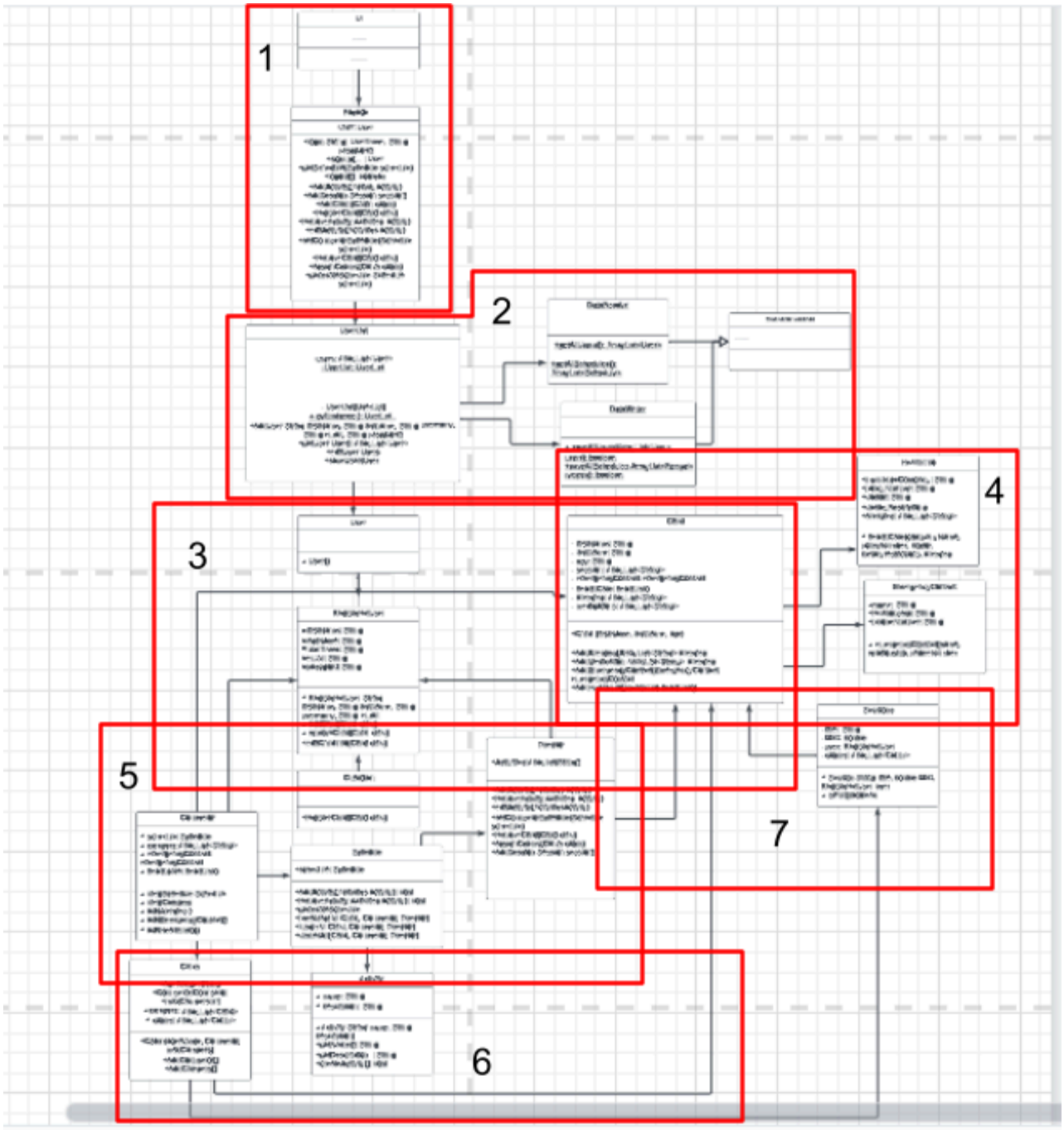
{"healthCare":"Medicare, JJ4359348535, Dr. Donald",
 "id":"123456758"}
]
```

Class Diagram – Structural Design

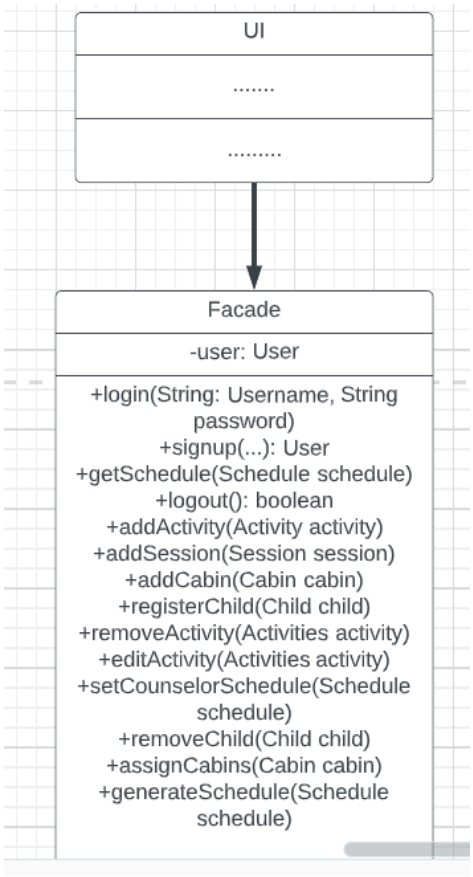
Full view:



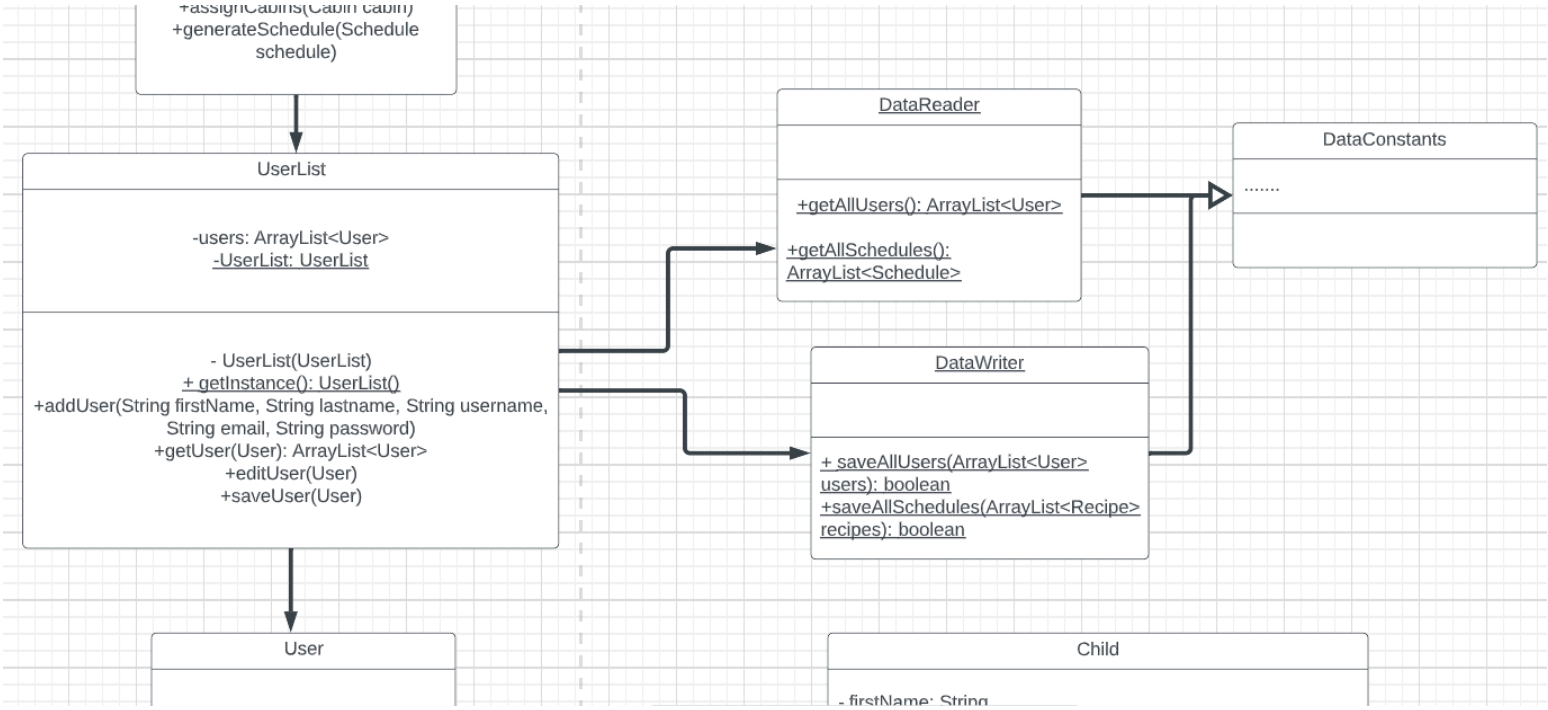
Sectioned view:



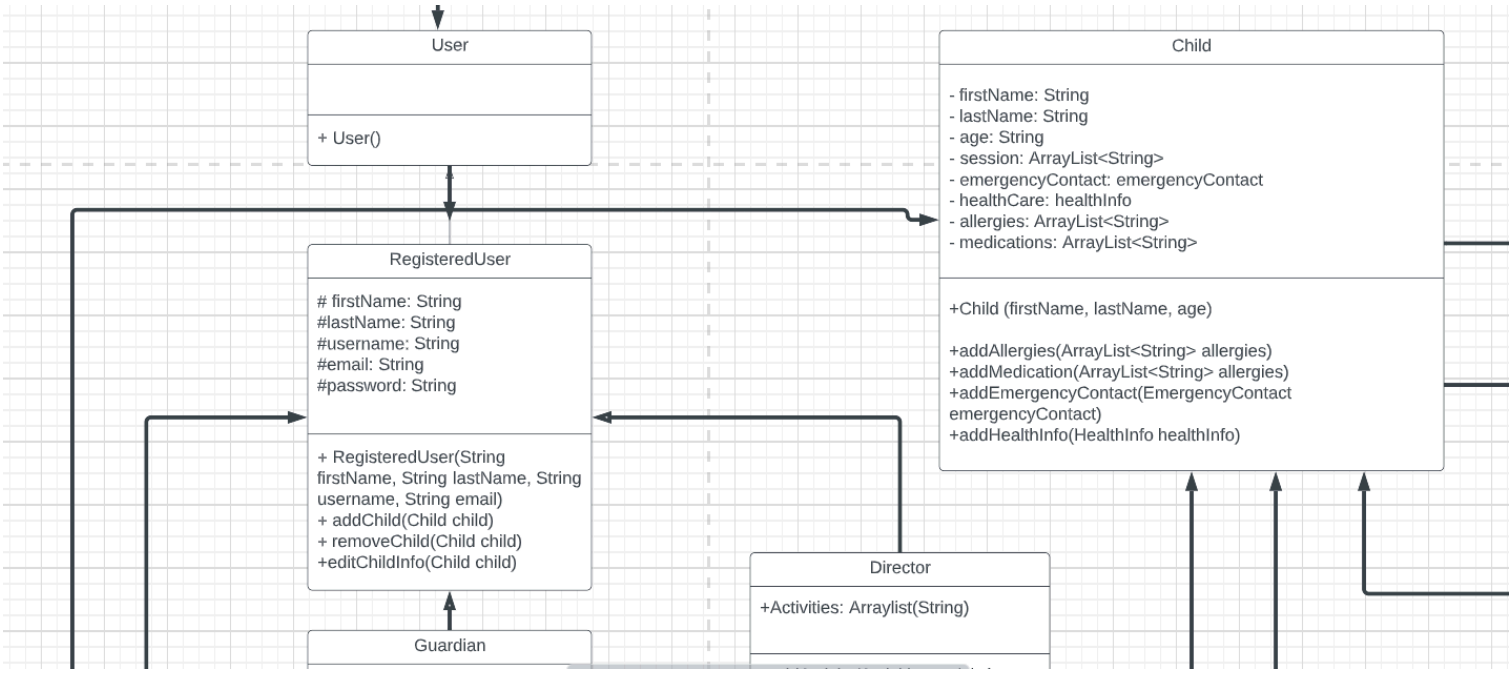
1:


UI
.....
.....
Facade
-user: User
+login(String: Username, String password)
+signup(...): User
+getSchedule(Schedule schedule)
+logout(): boolean
+addActivity(Activity activity)
+addSession(Session session)
+addCabin(Cabin cabin)
+registerChild(Child child)
+removeActivity(Activities activity)
+editActivity(Activities activity)
+setCounselorSchedule(Schedule schedule)
+removeChild(Child child)
+assignCabins(Cabin cabin)
+generateSchedule(Schedule schedule)

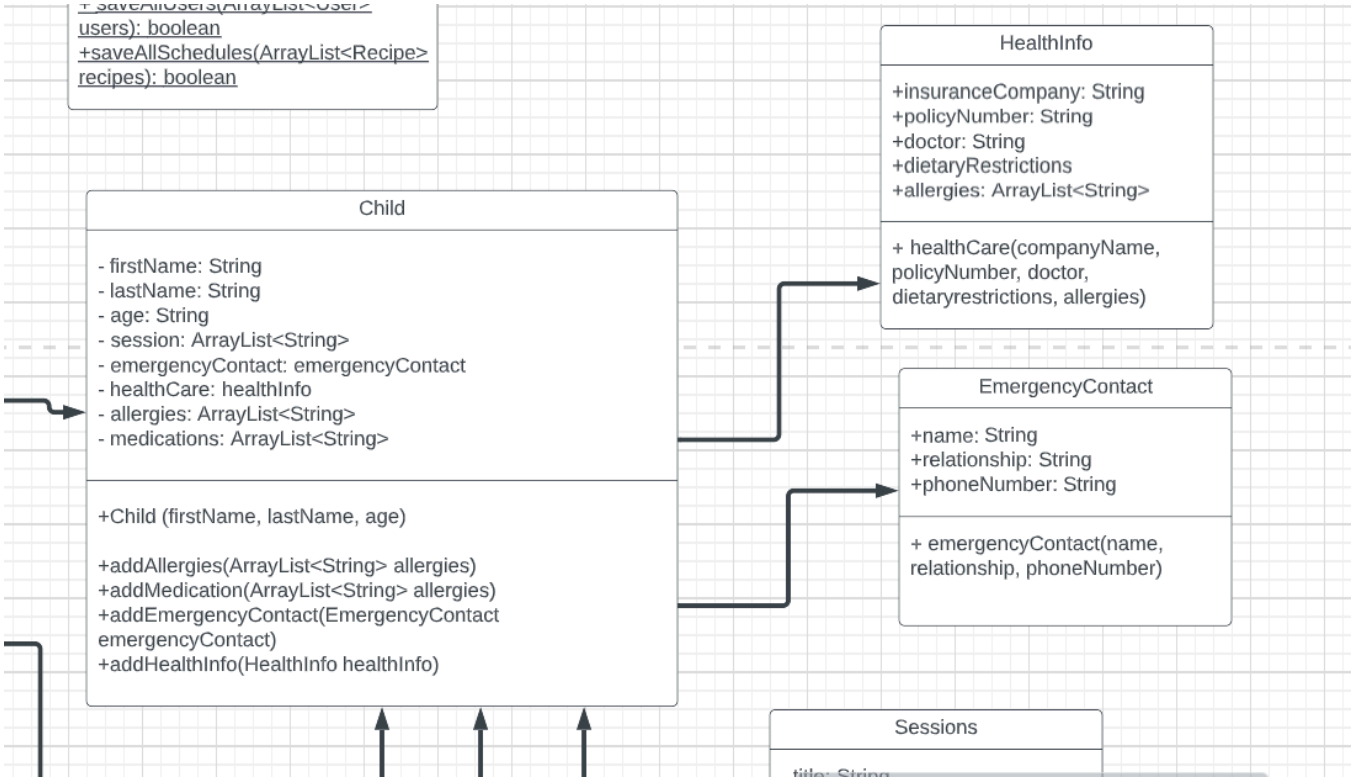
2:


+generateSchedule(Schedule schedule)
UserList
-users: ArrayList<User>
-UserList: UserList
- UserList(UserList)
+ getInstance(): UserList()
+addUser(String firstName, String lastname, String username, String email, String password)
+getUser(User): ArrayList<User>
+editUser(User)
+saveUser(User)
DataReader
+getAllUsers(): ArrayList<User>
+getAllSchedules(): ArrayList<Schedule>
DataConstants
.....
DataWriter
+ saveAllUsers(ArrayList<User> users): boolean
+saveAllSchedules(ArrayList<Recipe> recipes): boolean
User
Child
- firstName: String

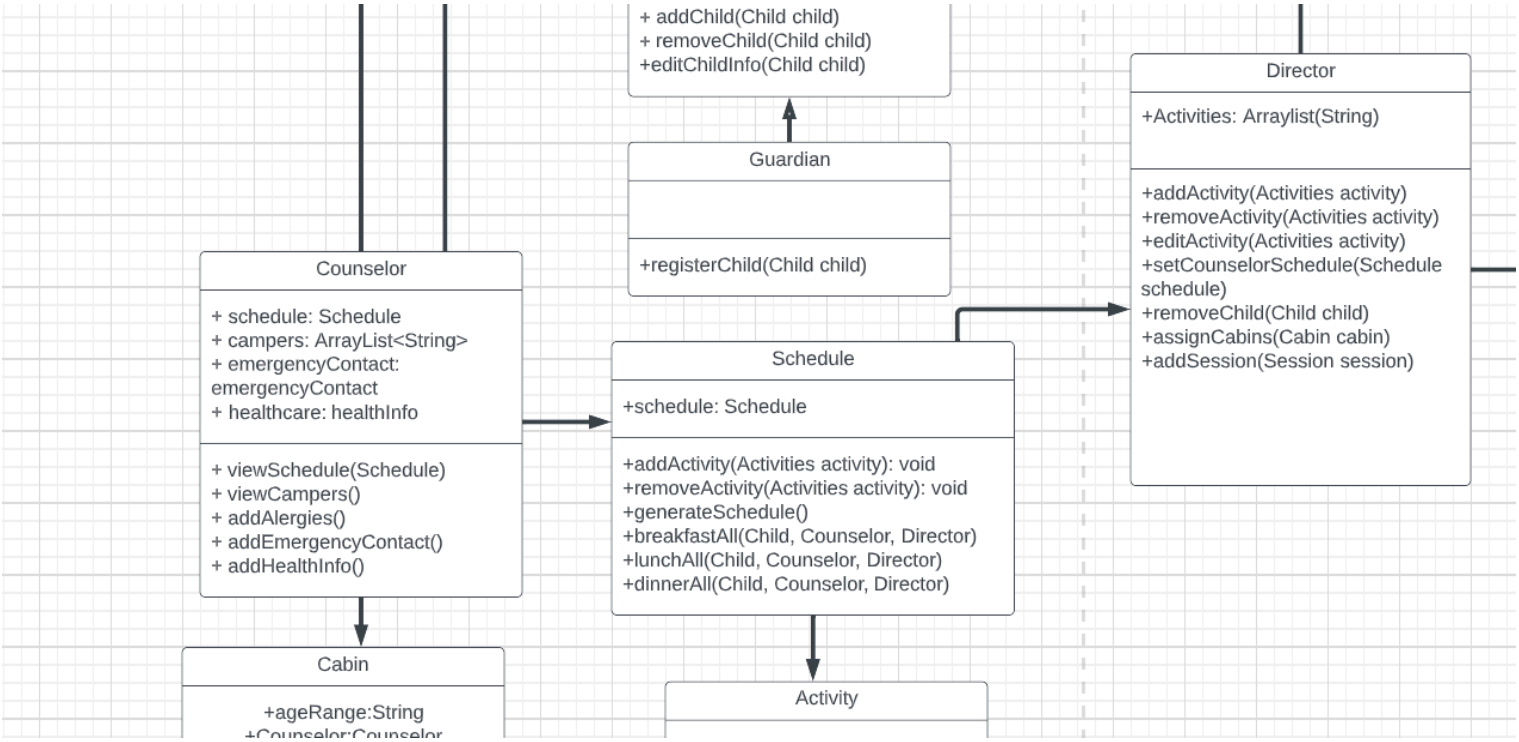
3:


User
+ User()
Child
- firstName: String
- lastName: String
- age: String
- session: ArrayList<String>
- emergencyContact: emergencyContact
- healthCare: healthInfo
- allergies: ArrayList<String>
- medications: ArrayList<String>
+Child (firstName, lastName, age)
+addAllergies(ArrayList<String> allergies)
+addMedication(ArrayList<String> allergies)
+addEmergencyContact(EmergencyContact emergencyContact)
+addHealthInfo(HealthInfo healthInfo)
RegisteredUser
firstName: String
#lastName: String
#username: String
#email: String
#password: String
+ RegisteredUser(String firstName, String lastName, String username, String email)
+ addChild(Child child)
+ removeChild(Child child)
+editChildInfo(Child child)
Director
+Activities: Arraylist(String)
Guardian

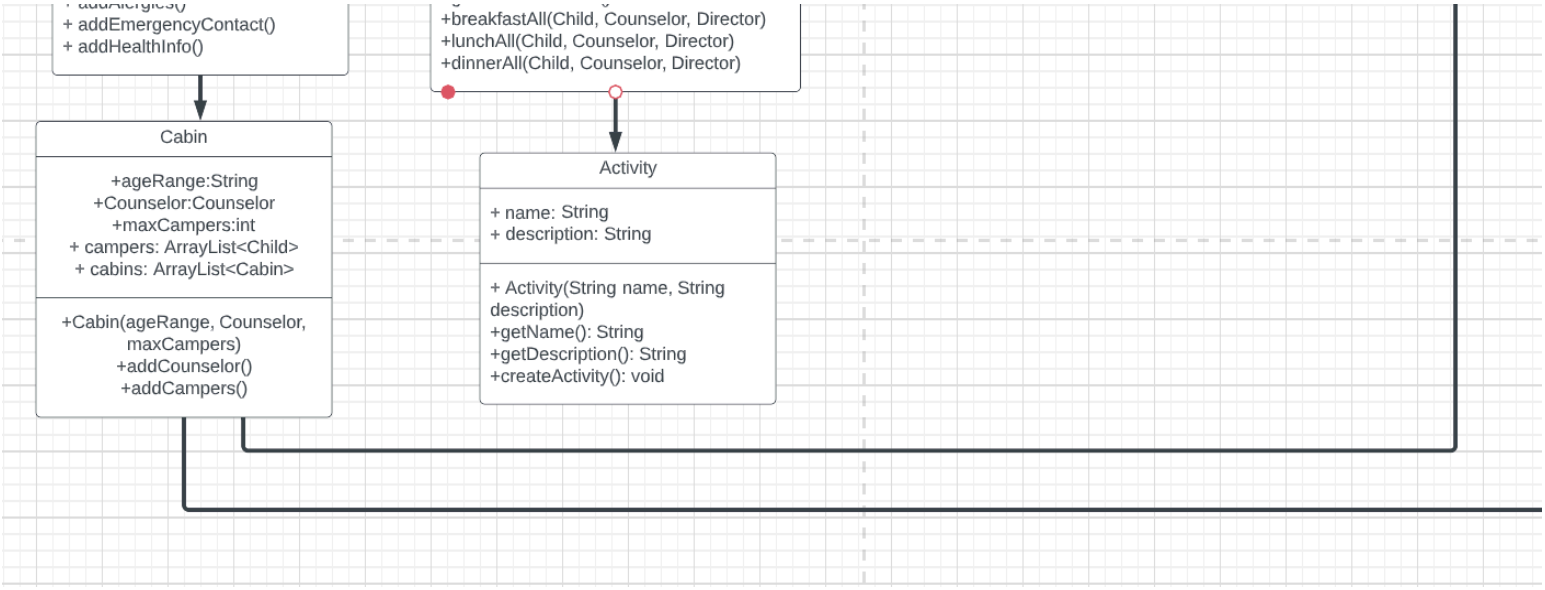
4:


users): boolean
+saveAllSchedules(ArrayList<Recipe> recipes): boolean
HealthInfo
+insuranceCompany: String
+policyNumber: String
+doctor: String
+dietaryRestrictions
+allergies: ArrayList<String>
+ healthCare(companyName, policyNumber, doctor, dietaryrestrictions, allergies)
Child
- firstName: String
- lastName: String
- age: String
- session: ArrayList<String>
- emergencyContact: emergencyContact
- healthCare: healthInfo
- allergies: ArrayList<String>
- medications: ArrayList<String>
+Child (firstName, lastName, age)
+addAllergies(ArrayList<String> allergies)
+addMedication(ArrayList<String> allergies)
+addEmergencyContact(EmergencyContact emergencyContact)
+addHealthInfo(HealthInfo healthInfo)
EmergencyContact
+name: String
+relationship: String
+phoneNumber: String
+ emergencyContact(name, relationship, phoneNumber)
Sessions

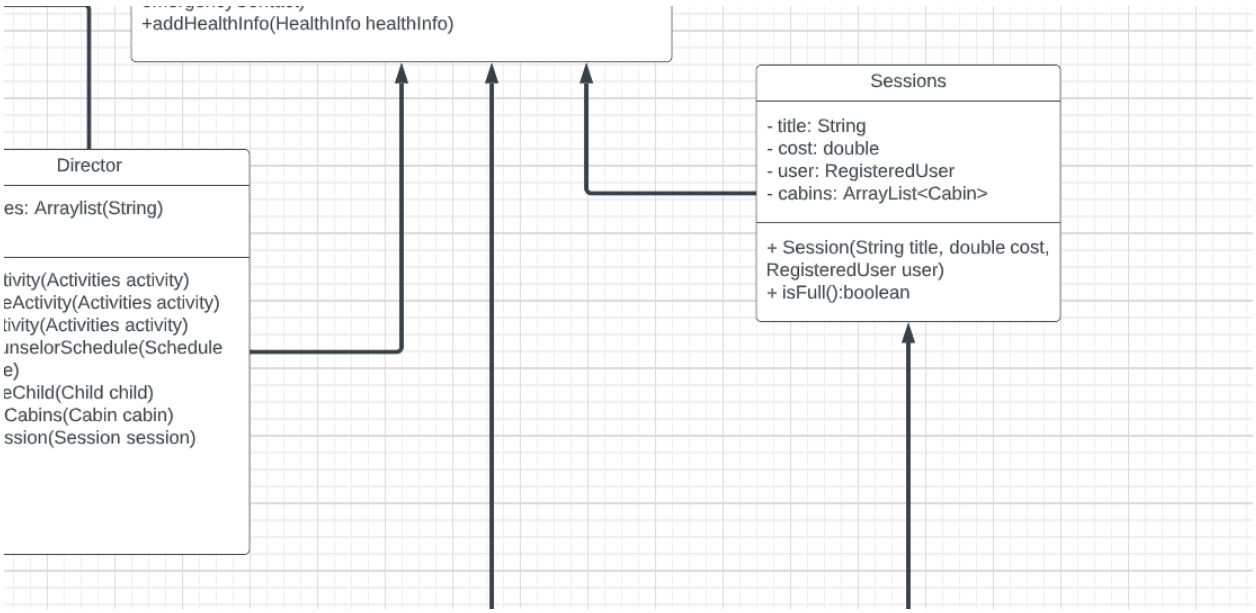
5:


+ addChild(Child child)
+ removeChild(Child child)
+editChildInfo(Child child)
Director
+Activities: Arraylist(String)
+addActivity(Activities activity)
+removeActivity(Activities activity)
+editActivity(Activities activity)
+setCounselorSchedule(Schedule schedule)
+removeChild(Child child)
+assignCabins(Cabin cabin)
+addSession(Session session)
Guardian
+registerChild(Child child)
Counselor
+ schedule: Schedule
+ campers: ArrayList<String>
+ emergencyContact: emergencyContact
+ healthcare: healthInfo
+ viewSchedule(Schedule)
+ viewCampers()
+ addAlergies()
+ addEmergencyContact()
+ addHealthInfo()
Schedule
+schedule: Schedule
+addActivity(Activities activity): void
+removeActivity(Activities activity): void
+generateSchedule()
+breakfastAll(Child, Counselor, Director)
+lunchAll(Child, Counselor, Director)
+dinnerAll(Child, Counselor, Director)
Cabin
+ageRange:String
Activity

6:

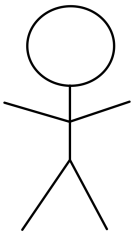

+ addEmergencyContact()
+ addHealthInfo()
+breakfastAll(Child, Counselor, Director)
+lunchAll(Child, Counselor, Director)
+dinnerAll(Child, Counselor, Director)
Cabin
+ageRange:String
+Counselor:Counselor
+maxCampers:int
+ campers: ArrayList<Child>
+ cabins: ArrayList<Cabin>
+Cabin(ageRange, Counselor, maxCampers)
+addCounselor()
+addCampers()
Activity
+ name: String
+ description: String
+ Activity(String name, String description)
+getName(): String
+getDescription(): String
+createActivity(): void

7:

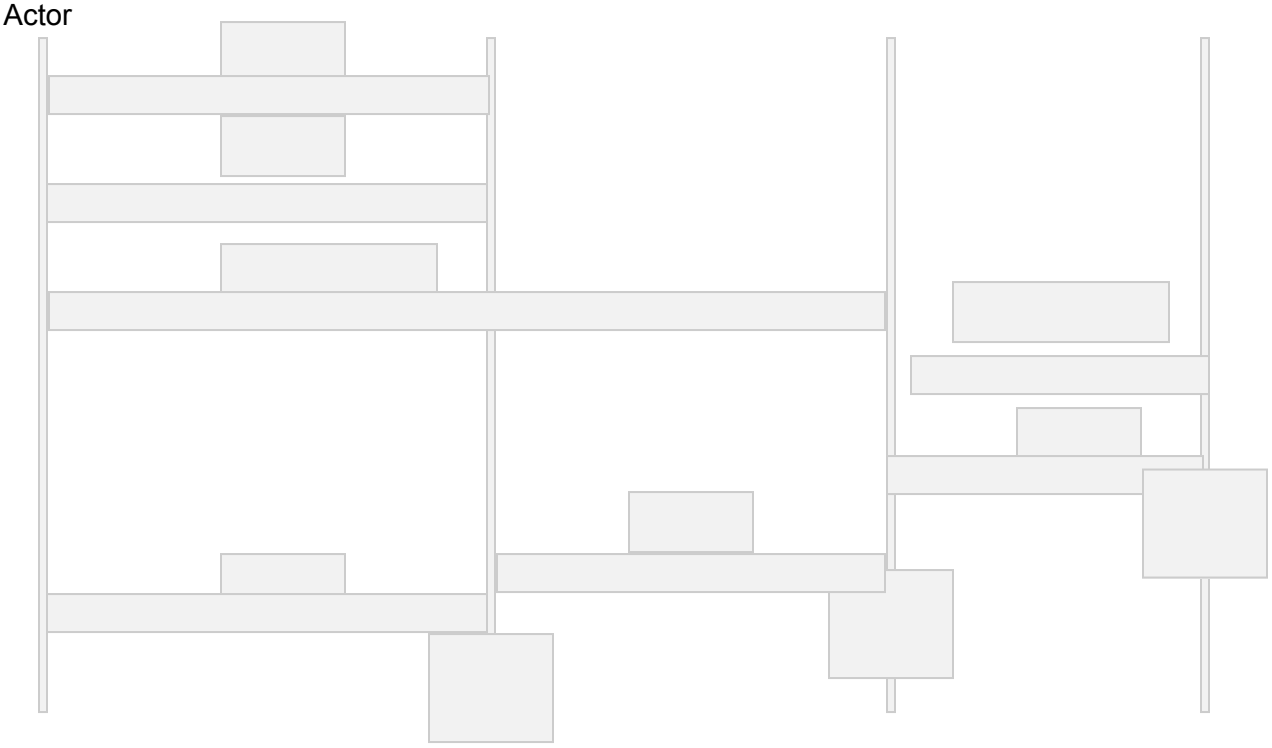


Sequence Diagrams – Dynamic Model

Add an activity



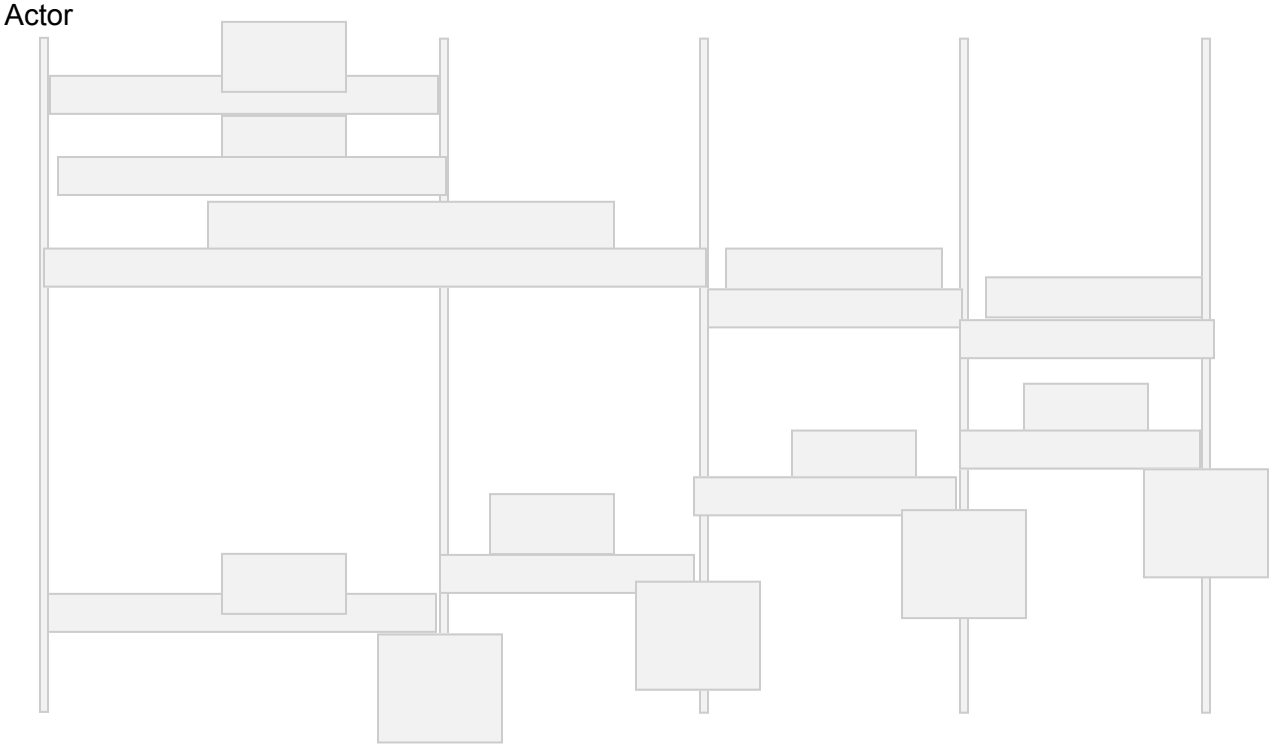
Actor



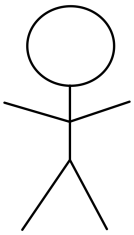
Add an emergency contact



Actor



View Schedule



Actor

