```
 1 course management system
 2  user:
 3     data: emailAddress, name, photo, password,schoolName
 4     behaviors: logIn, accessCourse, sendEmail, readEmail,
   uploadHomework, downloadFile, viewGrade
 5
 6  course:
 7     data: courseName, courseIDnumber, participantNumber,
   instructorInformation, courseFile
 8     behaviors:
 9
10  Manage course:
11     data: course
12     behaviors: addCourses, dropCourse,viewAllcourse
13
14 User phoebe;
15 ManageCourse coursezone;
16 phoebe.login(password);
17 Course javalearning = phoebe.view(courseIDnumber,courseName);
18 if javalearning isAvailable
19  phoebe.add(javalearning);
20  if phoebe change her mind
21     phoebe.dropCourse(javalearning);
22  else
23     coursezone.provideCoursecontent(javalearning);
24 else course isUnavailable
25
26
27 pet adoption platform
28  adopter:
29   data: Name,age, job, homeAddress,familyStatu, phone, pethistory
30   behaviors:adoptPet, searchPet, contactOrganization,
   fillAppalication, questionCounsel
31
32  Apply adoption:
33   data:pet
34   behaviors: sendRequest, fillApplication, pickAdoptionDate
35
36  pet:
37   data:petVariety, bodySize, age, gender, healthyCondition
38   behaviors:
39
40  adoption organization:
41   data:name, Address, petAmount, review, certificate
```

```
42   behaviors:collectAdpoterInformation, investigateAdopter,
   aduitApplication, takecarePet, transferPet
43
44 Adpoter phoebe;
45 adoptionOrganization petera;
46 phoebe.search(petvariety);
47 pet dog = phoebe.search(petVariety, age, healthCondition);
48 if dog isAvailable
49  phoebe.adopt(dog);
50  petera.collectAdpoterInformation(phoebe.age, phoebe.gender,
   phoebe.phone, phoebe.address);
51  petera.aduitApplication(phoebe.familystutas, phoebe.pethistory);
52 else dog isUnavailable
53
54 book airline ticket
55 Passenger:
56  data:emailAddress, loginCredentials, phone, creditCard,idNumber
57  behaviors:login, searchFlight, buyTicket, cancelTicket,
   requestRefund,requestchangeFlight
58
59 ticket booking:
60  data:flightinformation
61  behaviors:bookFlight, checkout,changeFlight,CancelFlight,Refund
62
63 flight:
64  data:Date,airline,destination,departCity,time,ticketClass,price
65  behaviors:
66
67 passenger phoebe;
68 Ticket booking Xiecheng;
69 Flight Chicago =
   phoebe.search(destination,airline,date,time,price);
70 if xiecheng isAvailable
71  phoebe.buy(Chicago);
72
   phoebe.checkout(phoebe.emailaddress,phoebe.phone,phoebe.creditCard
   ,phoebe.name,phoebe.idNumber);
73  if phoebe change her flight
74     phoebe.requestChangeFlight(Chicago);
75     xiecheng.changeFlight(Chicago,phoebe);
76  if phoebe cancel her flight
77     phoebe.requestCancelFlight(Chicago);
78     xiecheng.refund(Chicago,phoebe);
79 else flight isUnavailable
```

```
 80
 81 course registration platform
 82 user:
 83  data:emailAddress,name,loginCredentials
 84  behaviors:
    searchCourse,RegisterCourse,DropCourse,WriteCoursereview
 85
 86 course registration:
 87  data:course
 88  behaviors:addusers,manageCourse
 89
 90 course:
 91
    data:courseName,school,instructor,courseIntroduction,courseTimelin
    e,CourseReview
 92
 93 User phoebe;
 94 Course Registration classadd;
 95 phoebe.login.(loginCredentials);
 96 Course accounting = phoebe.search(courseName,school,instructor);
 97 if Classadd isAvailable
 98  phoebe.add(accounting);
 99  phoebe.register(phoebe.emailAddress);
100  if phoebe change her decision
101     phoebe.requestDrop(accounting);
102     Classadd.dismiss(accounting,phoebe);
103  else
104     phoebe.writeCoursereview("****");
105 else course isUnavailable
106
107 Food delivery app
108 customer:
109
    data:Name,emailAddress,order,orderHistory,loginCredentials,address
    ,phone,creditCard,shoppingCart;
110
    behaviors:chooseRestaurant,addFood,requestCancelOrder,requestRefun
    d
111 restaurant:
112  data:Nmae,address,phone,businessHour,menu,review
113  behaviors:takeOrder,refund,deliverynotification,sendReceipt
114 delivery guy:
115  data:GPSInformation,Name,deliveryTime
116  behavior:TakeOrder,shareLocation
```

```
117
118  Customer phoebe;
119  delivery doorcrash;
120  phoebe.lohin(loginCredentials);
121  restaurant iHop = phoebe.search(name,address);
122  if iHop isOpen
123    phoebe.order(iHop);
124
     doorcrash.checkout(phoebe.order,phoebe.address,phoebe.phone,phoebe
     .creditCard);
125
     doorcrash.sendDeliverynotification(phoebe.emailAddress,phoebe.phon
     e);
126    if phoebe edit the order
127      phoebe.requestCancelorder(iHop);
128      doorcrash.refund(iHop,phoebe);
129  else restaurant is Notopen
130
131
132
133
134
135
136
137
138
139
```