

```
cancelFood (UID, serveDate, meal){  
    u = User.find(UID);  
    u.setLastActivity( getCurrentDateTime() );  
    bool = User.update(u);  
    if(bool == true){  
        reservedFood = Reserve.find(UID, serveDate, meal);  
        if (reservedFood == null){  
            return("unsuccessful");  
        } else {  
            result = Reserve.delete(reservedFood);  
            if(result == true)  
                return("successful");  
            else  
                return("unsuccessful");  
        }  
    } else {  
        return("unsuccessful");  
    }  
}
```

```
reserveFood (UID, serveDate, meal){  
    u = User.find(UID);  
    u.setLastActivity( getCurrentDateTime() );  
    bool = User.update(u);  
    if(bool == true){  
        result = Reserve.insert (UID, serveDate, meal);  
        if (result){  
            return("successful");  
        } else {  
            return("unsuccessful ");  
        }  
    } else {  
        return("unsuccessful ");  
    }  
}
```

```
increaseCredit (UID, credit) {  
    u = User.find(UID);  
    u.setLastActivity( getCurrentDateTime() );  
    bool = User.update(u);  
    if(bool == true){  
        bankT = makeBankTransaction(credit);  
        if(bankT){  
            u.credit += credit ;  
            result = IncreaseCreditLog.create(UID, credit) & User.update(UID);  
            if(result)  
                return ("successful");  
            else  
                return ("unsuccessful");  
        } else {  
            return ("unsuccessful");  
        }  
    } else {  
        return ("unsuccessful");  
    }  
}
```

```

transferCredit (srcUID , destUID , amount) {

    src = User.find(srcUID);

    dst = User.find(destUID);

    src.setLastActivity( getCurrentDateTime() );

    bool = User.update(src);

    if(bool == true) {

        valid = src == null || dst == null || src.credit < amount;

        if (valid == true){

            return ("unsuccessful");

        } else {

            src.credit -= amount;

            dst.credit += amount;

            result = User.update(src)

                        &User.update(dst)

                        &TransferCreditLog.insert(src, dst, amount);

            if(result == true)

                return ("successful");

            else

                return ("unsuccessful");

        }

    } else {

        return ("unsuccessful");

    }

}

```

```

getActivityReport(UID , startDate, endDate , reportType){
    u = User.find(UID);
    u.setLastActivity( getCurrentDateTime() );
    bool = User.update(u);
    if(bool == true){
        if (reportType == increase){
            logTable = IncreaseCreditLog.findMatching(UID, startDate, endDate);
        } else {
            logTable = TransferCreditLog.findMatching(UID, startDate, endDate);
        }
        return logTable;
    } else {
        return ("unsuccessful");
    }
}

getFoodSchedule(UID, weekStartDate, weekEndDate){
    u = User.find(UID);
    u.setLastActivity( getCurrentDateTime() );
    bool = User.update(u);
    if(bool = true) {
        g = u.gender;
        foodPlanTable = Serve.findMatching(UID, weekStartDate, weekEndDate, g);
        return foodPlanTable;
    } else {
        return("unsuccessful");
    }
}

```

```
login( UID , password ){  
    u = User.find ( UID );  
    if (u == null) {  
        return("unsuccessful");  
    } else {  
        if (u.password == password) {  
            u.isLogin = true ;  
            u.setLastActivity( getCurrentDateTime() );  
            bool = User.update(u);  
            if (bool == true){  
                type = User.getUserType(UID);  
                return type;  
            }else  
                return ("unsuccessful");  
        } else {  
            return("unsuccessful");  
        }  
    }  
}
```

```

logout(UID){
    u = User.find(UID);
    if (u == null || !u.isLogin){
        return("unsuccessful!");
    } else {
        u.isLogin = false;
        bool = User.update(u);
        if (bool == true)
            return("successful!");
        else
            return("unsuccessful!");
    }
}

registerUser(UID, password, name, gender){
    u = User.findAdmin();
    if (u != null){
        u.setLastActivity( getCurrentDateTime() );
        result = User.update(u) & User.insert(UID , password , name , gender);
        if(result == true)
            return("successful");
        else
            return("unsuccessful");
    } else {
        return ("unsuccessful");
    }
}

```

```

determineFood(foodName, price){
    u = User.findTheKitchen();
    if(u != null) {
        u.setLastActivity( getCurrentDateTime() );
        bool = User.update(u);
        if (bool == true) {
            f = Food.find(foodName);
            if (f == null){
                result = Food.insert(foodName, price);
                if(result == true)
                    return ("new food inserted successfully");
                else
                    return ("unsuccessful");
            } else {
                result = Food.update(foodName, price);
                if(result == true)
                    return ("food updated successfully");
                else
                    return ("unsuccessful");
            }
        } else {
            return("unsuccessful");
        }
    } else {
        return("unsuccessful");
    }
}

```



```

determineFoodPlan(foodName , serveDate , meal){
    u = User.findTheKitchen();
    if (u != null) {
        u.setLastActivity( getCurrentDateTime() );
        bool = User.update(u);
        if(bool == true) {
            f = Food.find(foodName);
            if ( f == null ) {
                return("unsuccessful!");
            } else {
                result = Serve.insert(foodName, serveDate, meal);
                if (result == true)
                    return("successful");
                else
                    return("unsuccessful!");
            }
        } else {
            return ("unsuccessful");
        }
    } else {
        return ("unsuccessful");
    }
}

```

```
foodStatisticsSearch(serveDate, meal , gender ){  
    u = User.findTheKitchen();  
    if (u == null) {  
        return ("unsuccessful");  
    } else {  
        u.setLastActivity( getCurrentDateTime() );  
        bool = User.update(u);  
        if ( bool == true) {  
            reserveTable = Reserve.findMatching( serve_date, meal , gender );  
            return reserveTable;  
        } else {  
            return ("unsuccessful");  
        }  
    }  
}
```

```
getFoodStatistics(startServeDate, endServeDate){  
    u = User.findTheKitchen();  
    if( u == null) {  
        return ("unsuccessful");  
    } else {  
        u.setLastActivity( getCurrentDateTime() );  
        bool = User.update(u);  
        if(bool == true) {  
            reserveTable = Reserve.findMatching(startServeDate, endServeDate);  
            return reserveTable;  
        } else {  
            return ("unsuccessful");  
        }  
    }  
}
```

```
getNewFoodPrice( request ) {  
  if(request){  
    u = User.findAdmin();  
    if (u != null){  
      u.setLastActivity( getCurrentDateTime() );  
      bool = User.update(u);  
      if(bool == true)  
        foodList = Food.findAll ( ).where (isApproved == false);  
      return foodList;  
    } else {  
      return ("unsuccessful");  
    }  
  } else {  
    return ("unsuccessful");  
  }  
} else {  
  Return ('unsuccessful')  
}  
}
```

```
approveNewFoodPrice (priceApprovementList) {  
    u = User.findAdmin();  
    if (u != null){  
        u.setLastActivity( getCurrentDateTime() );  
        bool = User.update(u);  
        if(bool == true)  
            index = 0;  
        foreach (approve : priceApprovementList) {  
            if (approve == true) {  
                foodList[index].isApproved = true;  
            }  
            index++;  
        }  
        result = Food.update(foodList);  
        if (result == true) {  
            return ("successful");  
        } else {  
            return ("unsuccessful");  
        }  
    } else  
        return("unsuccessful");  
} else {  
    return ("unsuccessful");  
}  
}
```

```
makeBankTransaction(amount){  
    transacted = transact(amount)  
    valid = ( amount == transacted )  
    return valid;  
}
```