

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

increaseCredit (UID, credit) {
    u = User.find(UID);
    u.lastActivity = 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");
    }
}
}

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transferCredit (srcUID , destUID , amount) {

    src = User.find(srcUID);

    dst = User.find(destUID);

    src.lastActivity = 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");

    }

}

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getActivityReport(UID , startDate, endDate , reportType){
    u = User.find(UID);
    u.lastActivity = 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);
    g = u.gender;
    u.lastActivity = getCurrentDateTime();
    bool = User.update(u);
    if(bool = true) {
        resultTable = Serve.findMatching(UID, weekStartDate, weekEndDate, g);
        return resultTable;
    } else {
        return("unsuccessful");
    }
}

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login( UID , password ){
    u = User.find ( UID );
    if (u == null) {
        return("unsuccessful");
    } else {
        if (u.password == password) {
            u.isLogin = true ;
            u.lastActivity = getCurrentDateTime();
            bool = User.update(u);
            if (bool == true)
                return ("successful");
            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!");
    }
}

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    }
}

registerUser(UID, password, name, gender){
    u = User.findAdmin();
    if (u != null){
        u.lastActivity = 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.lastActivity = getCurrentDateTime();
        bool = User.update(u);
        if (bool == true) {
            f = Food.find(foodName);
            if (f == null){
                result = Food.insert(foodName, price, false);
                if(result == true)
                    return ("new food inserted successfully");
                else
                    return ("unsuccessful");
            } else {

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        result = Food.update(foodName, price, false);
        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.lastActivity = 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!");
            }
        }
    }
}

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        } else {
            return ("unsuccessful");
        }
    } else {
        return ("unsuccessful");
    }
}

foodStatisticsSearch(serveDate, meal , gender ){
    u = User.findTheKitchen();
    if (u == null) {
        return ("unsuccessful");
    } else {
        u.lastActivity = 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.lastActivity = getCurrentDateTime();
        bool = User.update(u);
    }
}

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        if(bool == true) {
            reserveTable = Reserve.findMatching(startServeDate, endServeDate);
            return reserveTable;
        } else {
            return ("unsuccessful");
        }
    }
}

kickOut () {
    users[] = User.findAll().where(isLogin == true);
    counter = 0;
    foreach(u : users) {
        if (u.lastActivity – currentDateTime() > 12)
            u.isLogin = false;
            result = User.update(u);
            if (result == true)
                counter++;
    }
}

approveFoodPrice ( listOfFoodRequests[ ] ){
    u = User.findAdmin();
    u.lastActivity = getCurrentDateTime();
    foodPrices = Food.findPrice (listOfFoodRequests[ ] );
    index = 0
    foreach(food : listOfFoodRequests){
        index++
        exist = Food.find(food)
        if(exist){
            appropriatePrice = getAppropriatePrice(foodName);

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        if(appropriatePrice == foodPrice){  
            Food.isApproved = true;  
            Food.update(foodName);  
        } else {  
            Result_list[i] = "unsuccessful"  
        }  
    }  
    Return(result_list)  
}
```