**Chocoholics Anonymous Software Product**

**Pseudocode for Detailed Design of Major Class Methods**

**Claim Class:**

**void submitClaim(int providerID, int memberID, string dateAndTime, string dateProvided, string comments):**

create a new claim object to hold the new claim

send the claim object to the claim container

**Member Class:**

**void verifyMember(ID):**

for i in size of memberContainer:

if memberContainer is empty:

print there are no members in container to show

else if value in memberContainer at i equals ID:

print Validated if there member is valid and has paid up to date

print Invalid and reason

else

print Member was not found

**void memberController(container, newMember):**

add the newMember to the vector

**void printMemberList():**

for i in size of memberContainer:

if memberContainer is empty:

print there are no members in container to show

else:

print the memberContainer contents in the desired format

**Operator Class:**

**void addMember(ID, name,streetAddress,city,state,zipCode):**

new\_member = MemberClass(ID, name,streetAdress,city,state,zipCode)

for i in memberList:

if (new\_member not in vector)

add the member to the vector

else

print error

**void addProvider(ID, name, streetAddress, city, state, zipCode):**

new\_provider = ProviderClass(ID, name,streetAdress,city,state,zipCode)

for i in providerList:

if (new\_provider not in vector)

add the provider to the vector

else

print error

**void addService(code, name, fee):**

new\_service = Service(code, name, fee)

for i in serviceList:

if (new\_service not in vector)

add the service to the vector

else

print error

**void deleteMember(id):**

for i in memberList:

if id in memberList

memberList.remove(id)

else

print error

**void deleteProvider(id):**

for i in providerList:

if id in providerList

providerList.remove(id)

else

print error

**void deleteService(code):**

for i in serviceList:

if code in serviceList

serviceList.remove(service)

else

print error

**void updateExistingMember(id):**

for i in memberList:

if id in memberList

ask the operator what he would like to update

update that specific attribute for the specific member in the list

else

print error

**void updateExistingProvider(id):**

for i in providerList:

if id in providerList

ask the operator what he would like to update

update that specific attribute for the specific provider in the list

else

print error

**void updateExistingService(code):**

for i in serviceList:

if code in serviceList

ask the operator what he would like to update

update that specific attribute for the specific service in the list

else

print error

**Provider Class:**

**string verifyProvider(ID):**

for i in size of providerContainer:

if providerContainer is empty:

print there are no providers in container to show

else if value in providerContainer at i equals ID:

print provider was found

else

print provider was not found

**void providerController(container, newProvider):**

add the newProvider to the container

**void printProviderList():**

for i in size of providerContainer:

if providerContainer is empty:

print there are no providers in container to show

else:

print the providerContainer contents in the desired format

**Report Class:**

**void printManagerReport():**

reportForm = ""

providerList = all providers who provided service for week

i = 0

j = 0

totalSum = 0

for each provider in providerList:

sum = 0

k = 0

reportForm = reportform+','+str(providerName)

servicesProvided = all instances of a service offered in this week

for each service in servicesProvided:

sum += serviceFee

k += 1

reportForm = reportForm+','+str(j) #total number of services

reportForm = reportForm+','+str(sum) #total fee for provider

i += 1

j += k

totalSum += sum

reportForm = reportForm+','+str(i) #total number of providers who provided services

reportForm = reportForm+','+str(j) #total number of consultations

reportForm = reportForm+','+str(sum) #total fee fro all providers

write reportForm to file;

**void printMemberReport(member):**

reportForm = ""

reportForm = reportform+','+str(memberName)

reportForm = reportform+','+str(memberID)

reportForm = reportform+','+str(memberAddress)

reportForm = reportform+','+str(memberCity)

reportForm = reportform+','+str(memberState)

reportForm = reportform+','+str(memberZIPCode)

memberServices = all services provided to member for week

for each service in memberServices:

reportForm = reportForm+','+str(serviceDate)

reportForm = reportForm+','+str(providerName)

reportForm = reportForm+','+str(serviceName)

write reportForm to file;

**void printProviderReport(provider):**

reportForm = ""

i = 0

sum = 0

reportForm = reportform+','+str(providerName)

reportForm = reportform+','+str(providerID)

reportForm = reportform+','+str(providerAddress)

reportForm = reportform+','+str(providerCity)

reportForm = reportform+','+str(providerState)

reportForm = reportform+','+str(providerZIPCode)

serviceList = all services provided for week

for each service in serviceList:

reportForm = reportform+','+str(serviceDate)

reportForm = reportform+','+str(compDateAndTime)

reportForm = reportform+','+str(memberName)

reportForm = reportform+','+str(memberID)

reportForm = reportform+str(serviceCode)

reportForm = reportform+str(serviceFee)

i += 1

sum += serviceFee

reportForm = reportform+','+str(i) #total number of consultations

reportForm = reportform+','+str(sum) #total fee for the week

write reportForm to file;

**Service Class:**

**double lookUpFeeToBePaid(serviceCode):**

for i in providerDirectoryContainer:

if providerDirectory container is empty:

print nothing in the provider directory

else if providerDirectoryContainer at index i serviceCode equals the serviceCode provided to the function:

print the fee associated with the service at that index

else

print error

void createProviderDirectory(container, newService):

add the new service to the container

void printProviderDirectory(container):

for i in providerDirectoryContainer:

if providerDirectoryContainer is empty:

print nothing in the container to print

else:

print the providerDirectoryContainer in the specified format

**Terminal Class:**

**void userInterface():**

ask the user if he is a provider or an operator

if provider:

ask the provider for his/her provider ID

verify the provider ID is valid

if provider ID is valid:

ask the provider to enter a member ID

verify the member ID is valid

if member ID is valid:

ask the provider to enter the date the service was provided

retrieve the current date and time in the background

ask the provider to enter the service code

validate the service code with provider

look up the fee to be paid for the service

ask the provider to enter any additional comments he/she has

pass the information the provider entered to the claim class for storage

else member ID is invalid:

print invalid and why

else provider ID is not valid:

print error

if operator:

ask the operator if he would like to do something with a member, provider, or service

if choice is member:

ask the operator if he would like to add a member, delete a member, or update a member

if choice is add:

add the new member to the memberContainer via addMember function in operator

else if choice is delete:

delete the member from the memberContainer via deleteMember function in operator

else

update the member from the memberContainer via updateMember function in operator

else if choice is provider:

ask the operator if he would like to add a provider, delete a provider, or update a provider

if choice is add:

add the new provider to the providerContainer via addProvider function in operator

else if choice is delete:

delete the provider from the providerContainer via deleteProvider function in operator

else

update the provider from the providerContainer via updateProvider function in operator

else

ask the operator if he would like to add a service, delete a service, or update a service

if choice is add:

add the new service to the providerDirectoryContainer via addService in operator

else if choice is delete:

delete the service from the providerDirectoryContainer via deleteService in operator

else

update the service from the providerDirectoryContainer via updateService in operator

**Time and Percentage Log**

**Task**

1. Detailed Class Diagram (45%)

* Josh Cutolo 15%
* Josh Pinos 15%
* James Fisher 15%

1. Pseudocode (40%)

* Josh Cutolo 13.3333%
* Josh Pinos 13.3333%
* James Fisher 13.3333%

1. Time Log (15 %)

* Josh Cutolo 5%
* Josh Pinos 5%
* James Fisher 5%