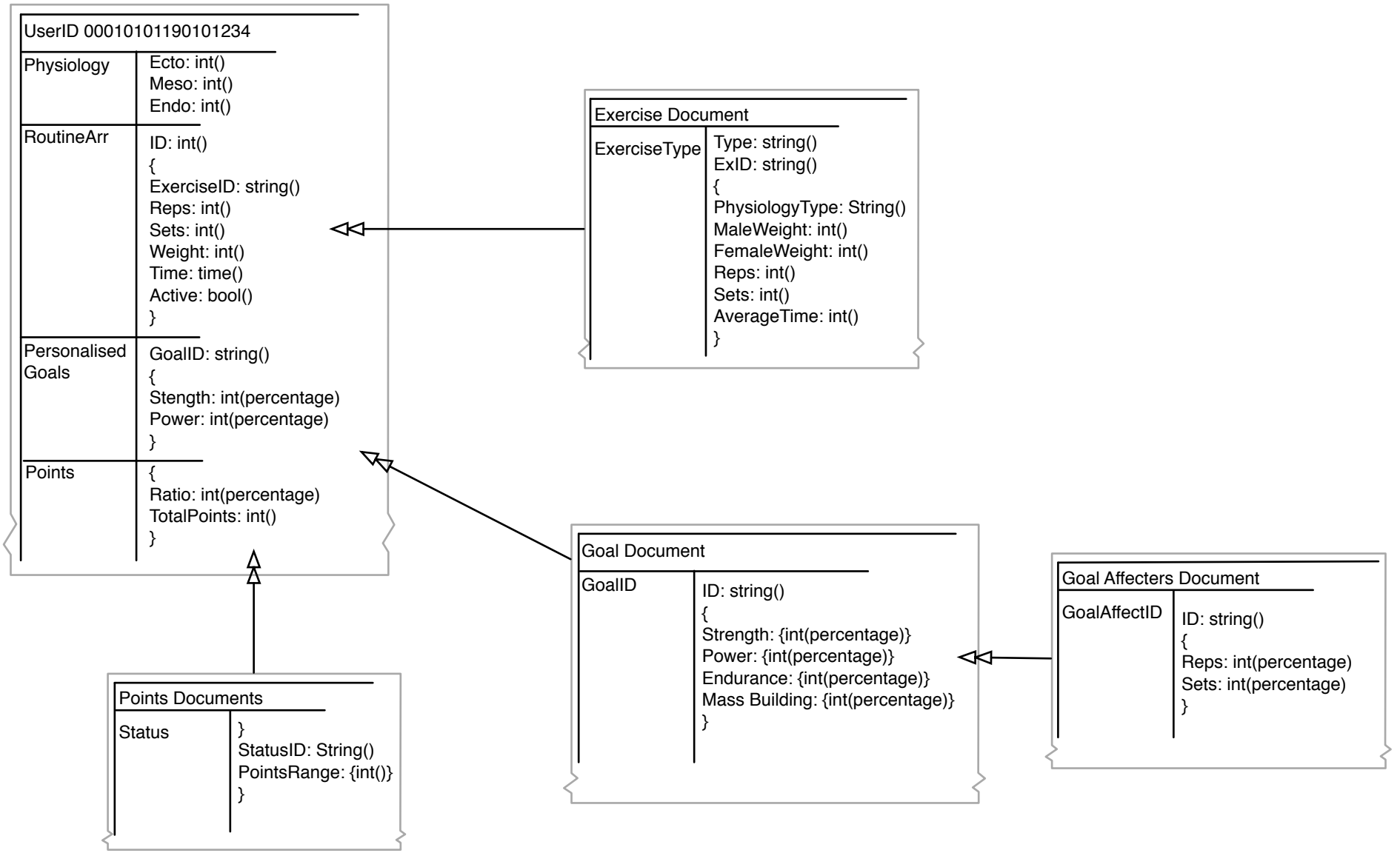
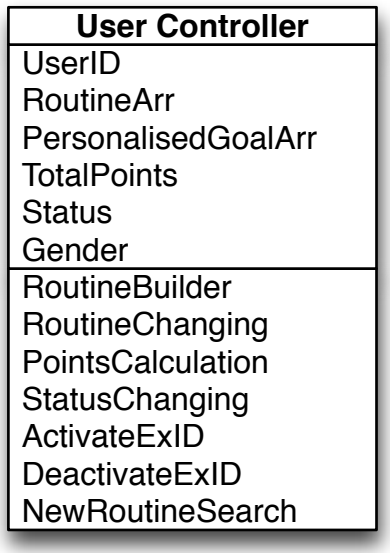
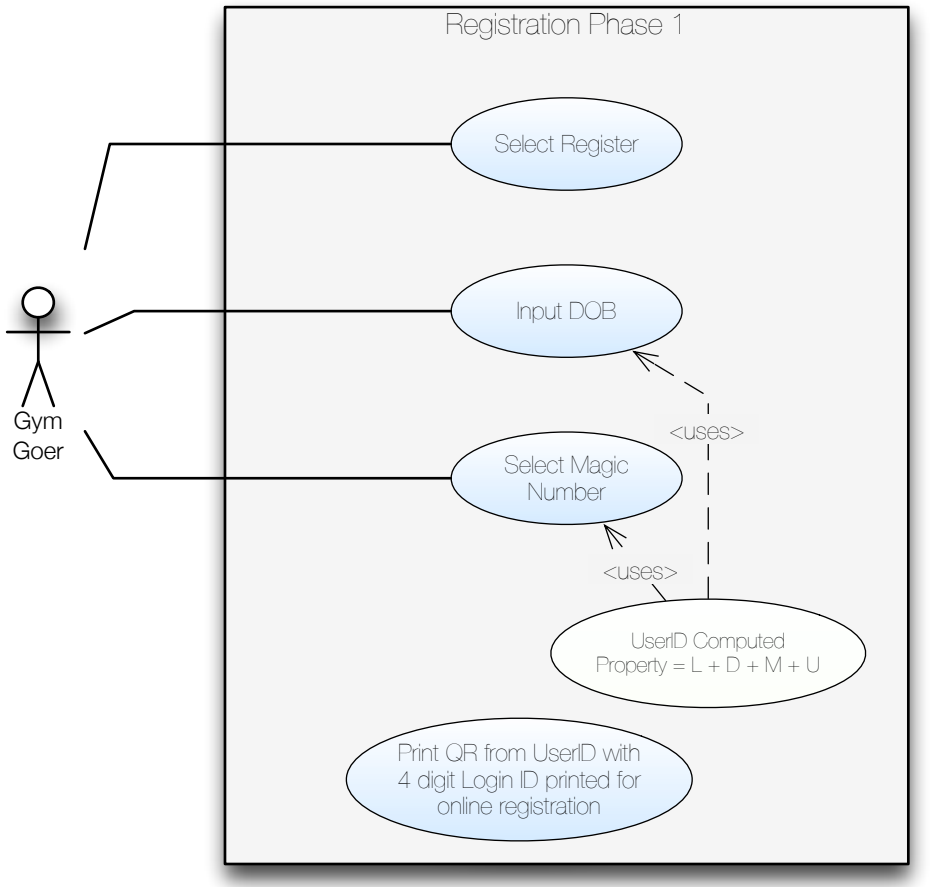
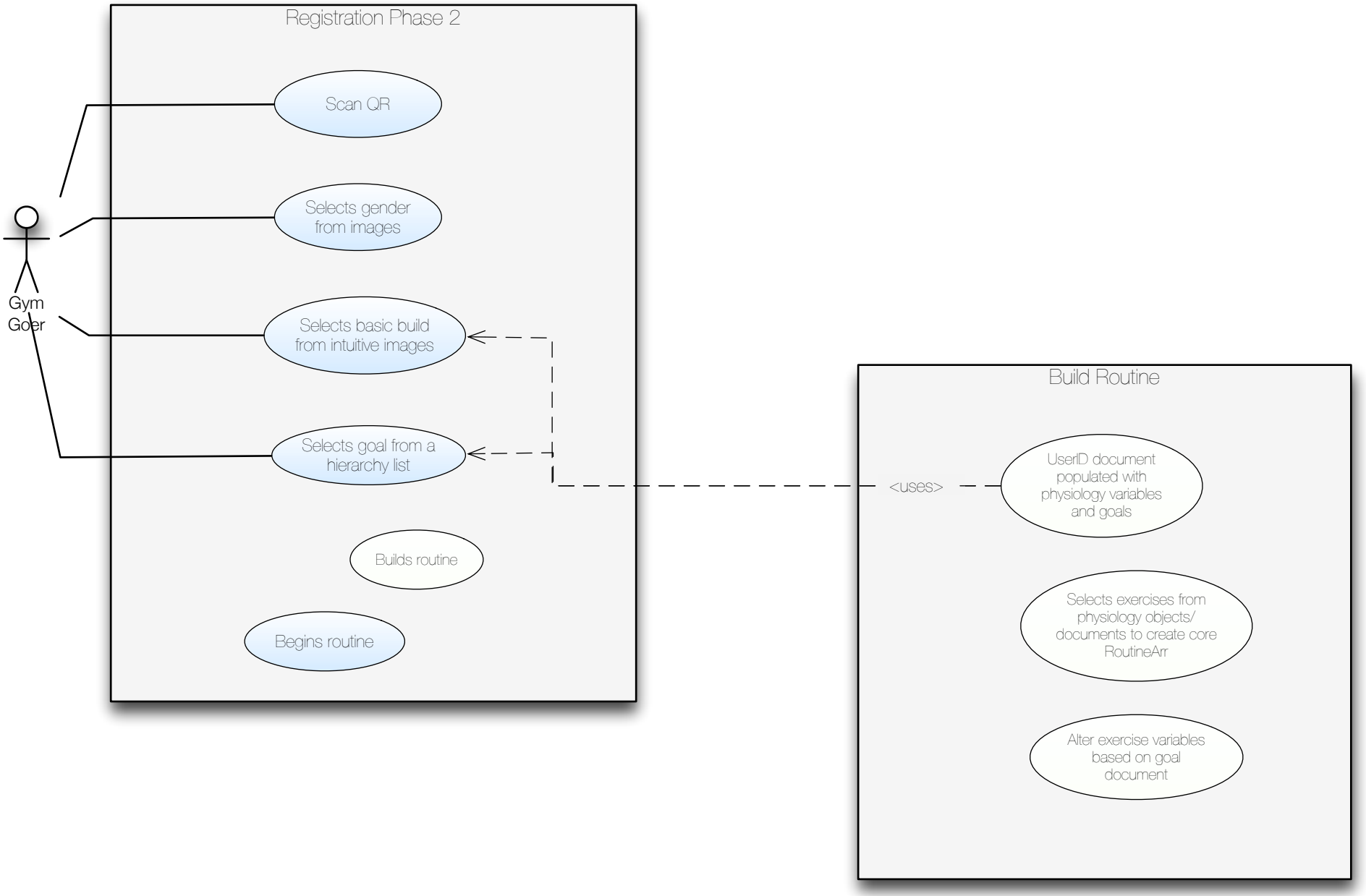
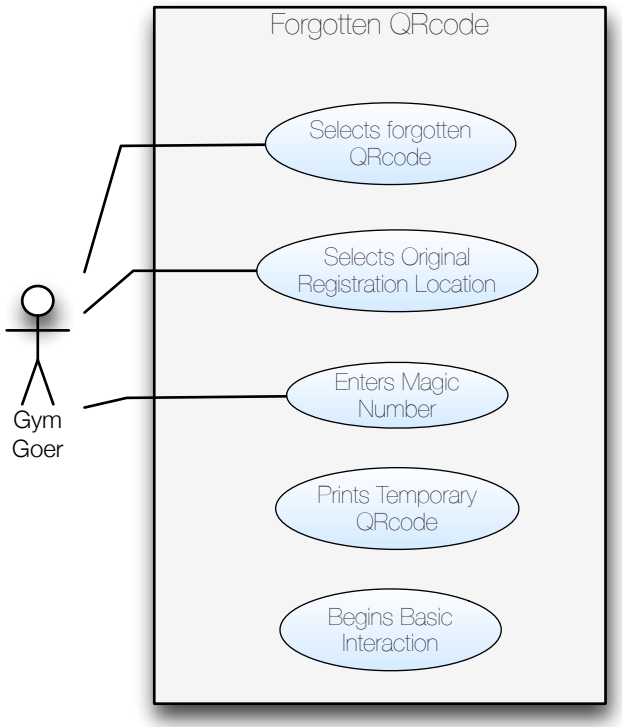
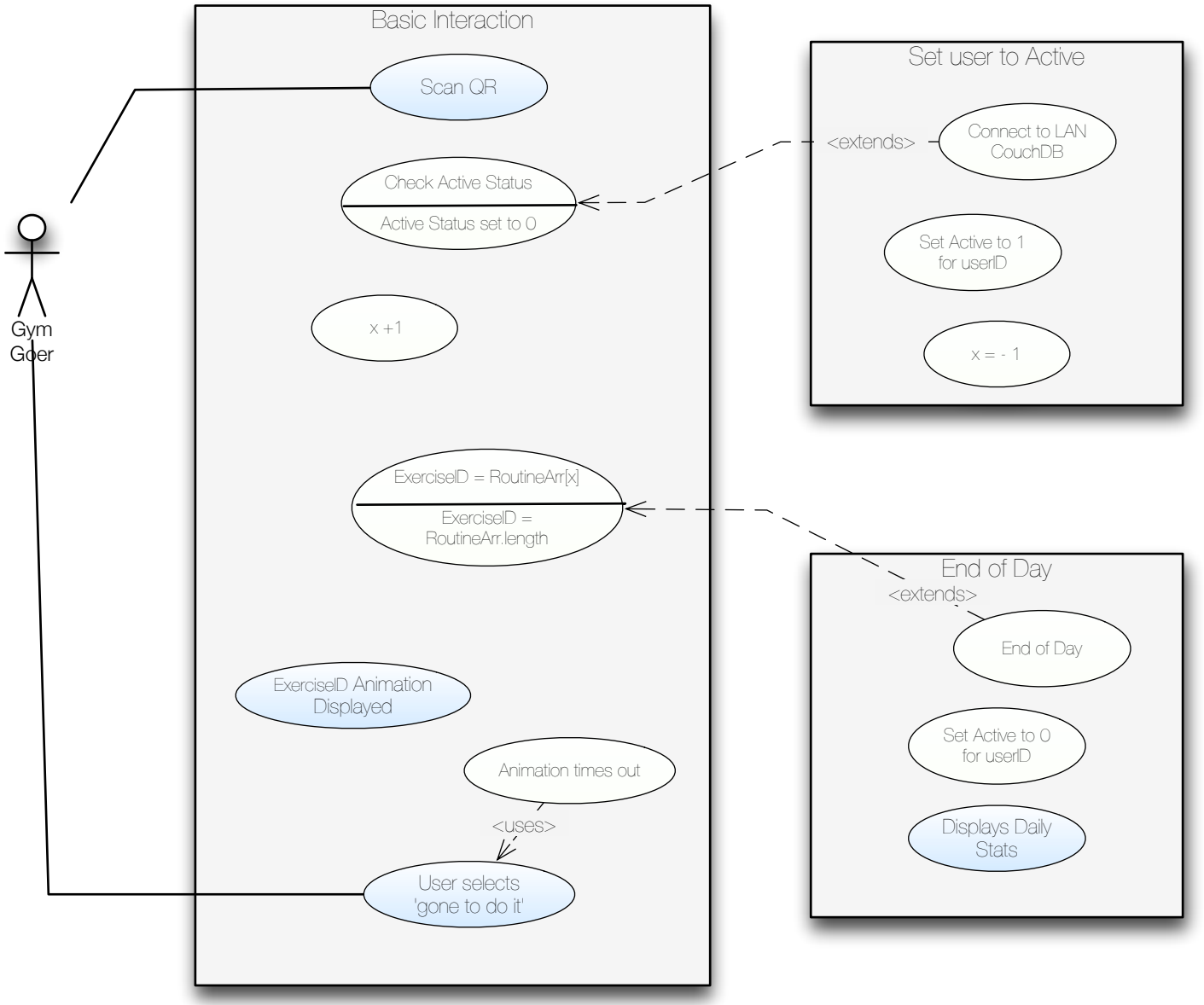

UserID 00010101190101234
Physiology
Ecto: int()
Meso: int()
Endo: int()
RoutineArr
ID: int()
{
ExerciseID: string()
Reps: int()
Sets: int()
Weight: int()
Time: time()
Active: bool()
}
Personalised Goals
GoalID: string()
{
Stength: int(percentage)
Power: int(percentage)
}
Points
{
Ratio: int(percentage)
TotalPoints: int()
}
Exercise Document
ExerciseType
Type: string()
ExID: string()
{
PhysiologyType: String()
MaleWeight: int()
FemaleWeight: int()
Reps: int()
Sets: int()
AverageTime: int()
}
Goal Document
GoalID
ID: string()
{
Strength: {int(percentage)}
Power: {int(percentage)}
Endurance: {int(percentage)}
Mass Building: {int(percentage)}
}
Goal Affecters Document
GoalAffectID
ID: string()
{
Reps: int(percentage)
Sets: int(percentage)
}
Points Documents
Status
}
StatusID: String()
PointsRange: {int()}
}

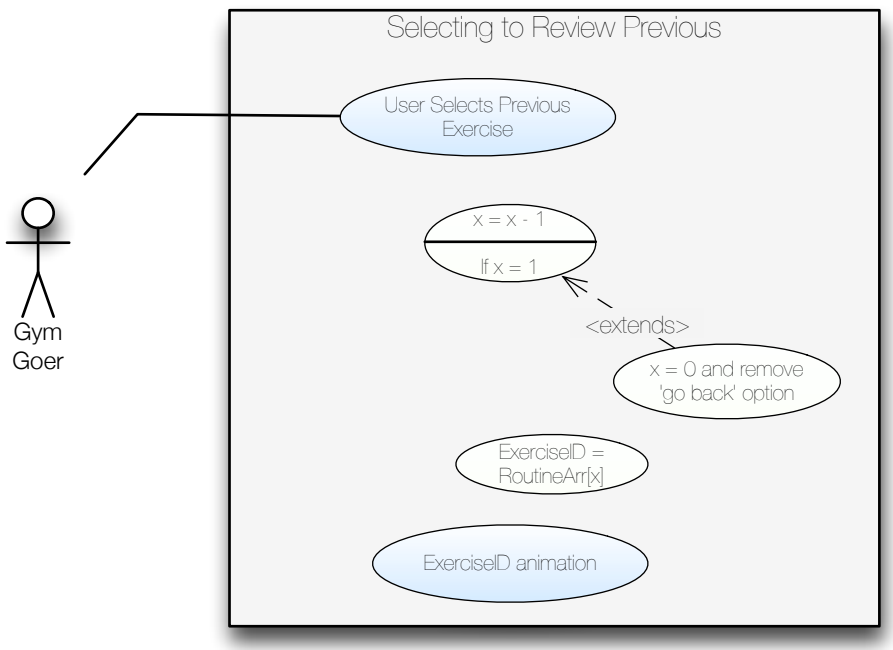

User Controller
UserID
RoutineArr
PersonalisedGoalArr
TotalPoints
Status
Gender
RoutineBuilder
RoutineChanging
PointsCalculation
StatusChanging
ActivateExID
DeactivateExID
NewRoutineSearch

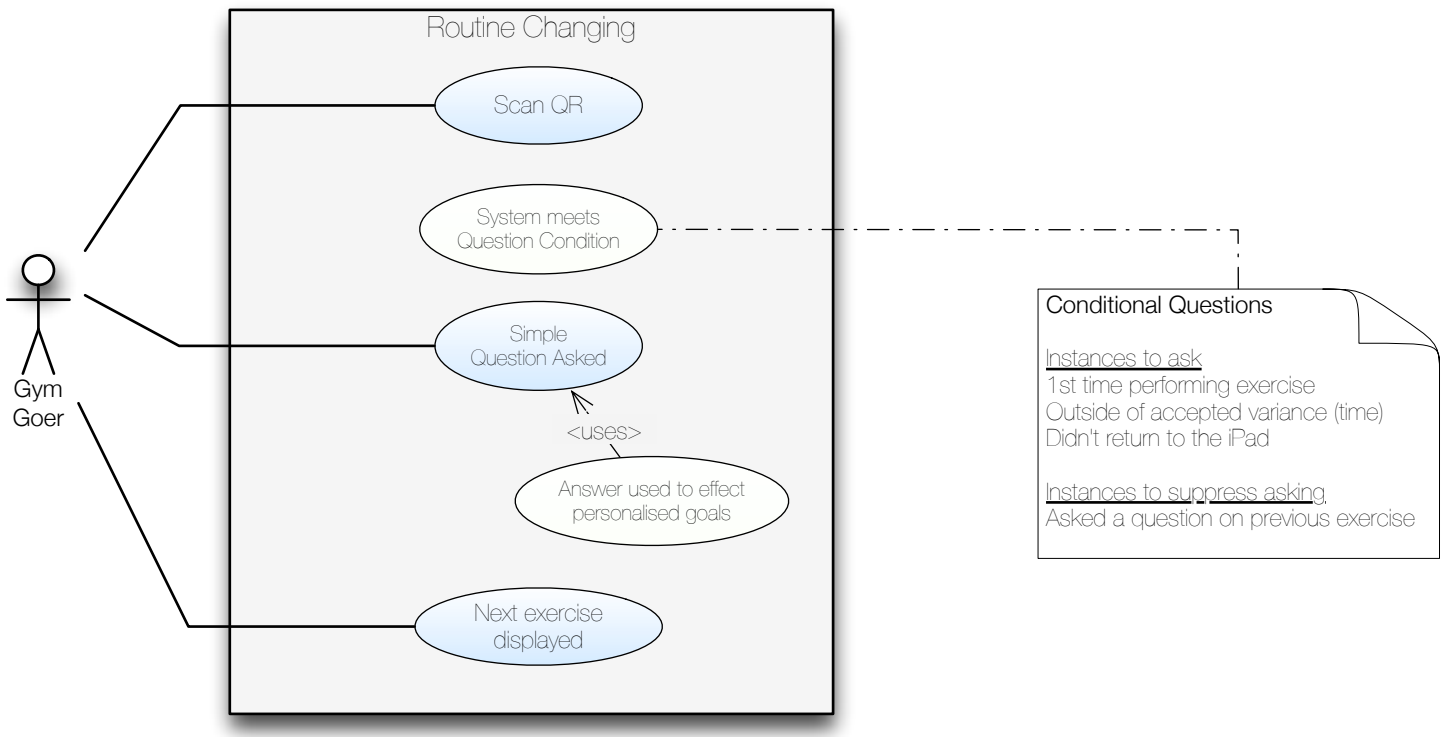

Registration Phase 1
Select Register
Input DOB
Select Magic Number
<uses>
<uses>
UserID Computed Property = L + D + M + U
Print QR from UserID with 4 digit Login ID printed for online registration
Gym Goer

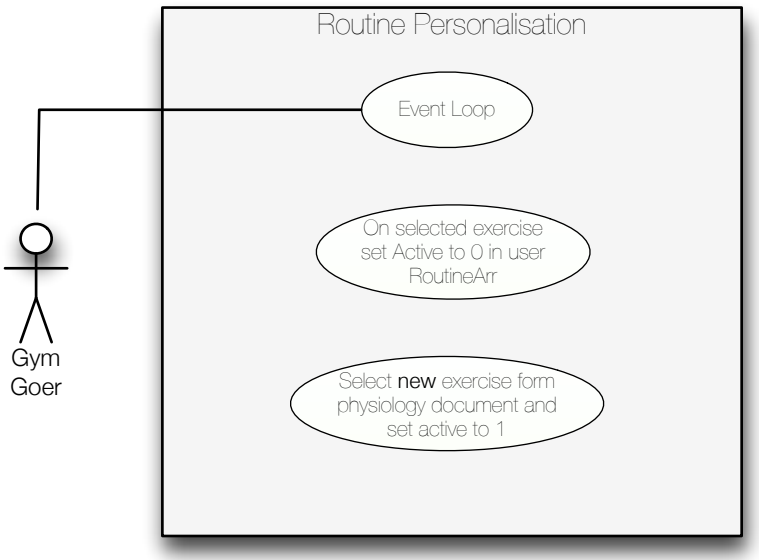

Registration Phase 2
Scan QR
Selects gender from images
Gym Goer
Selects basic build from intuitive images
Selects goal from a hierarchy list
Builds routine
Begins routine
<uses>
Build Routine
UserID document populated with physiology variables and goals
Selects exercises from physiology objects/ documents to create core RoutineArr
Alter exercise variables based on goal document

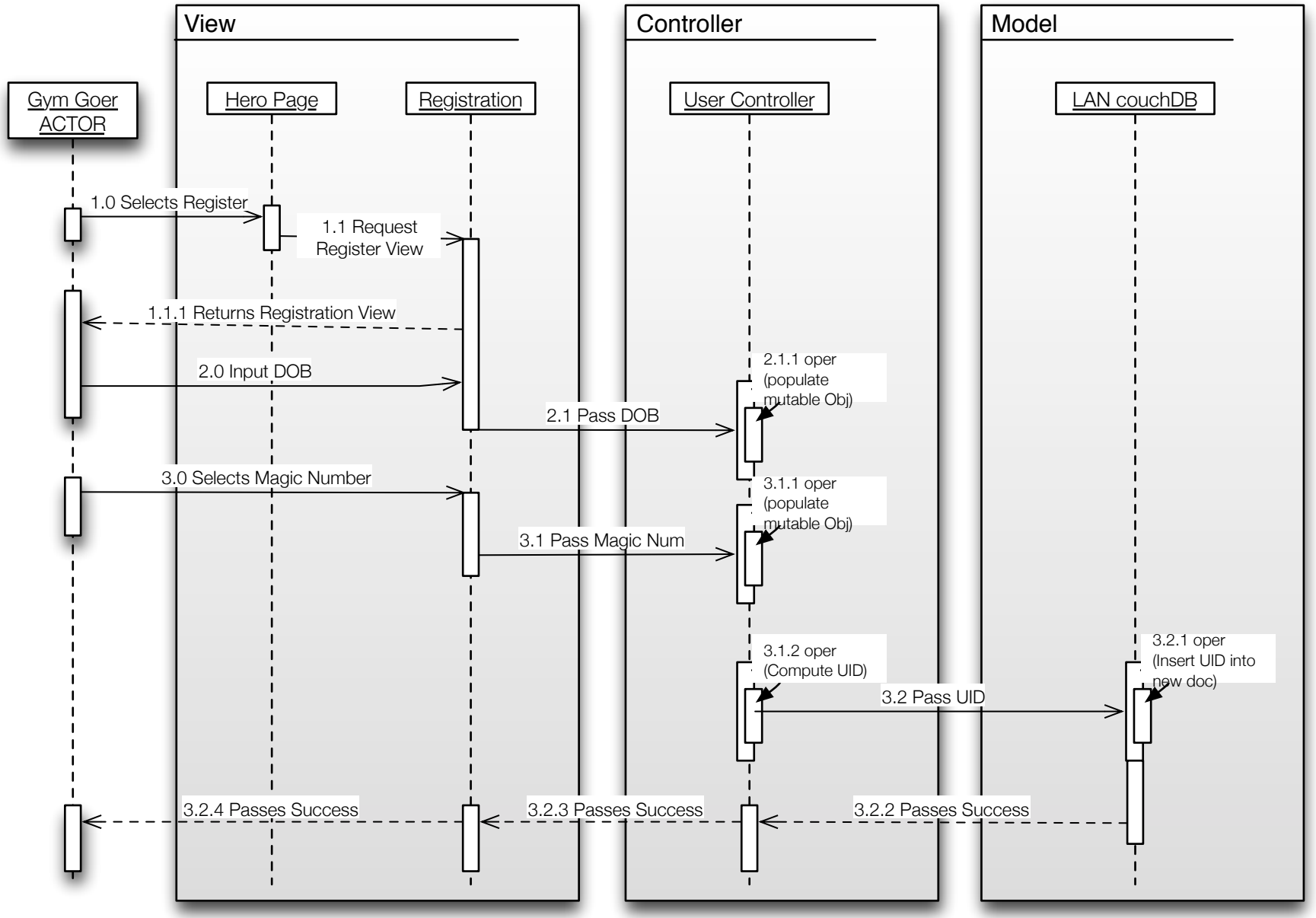

Forgotten QRcode
Selects forgotten QRcode
Selects Original Registration Location
Enters Magic Number
Prints Temporary QRcode
Begins Basic Interaction
Gym Goer

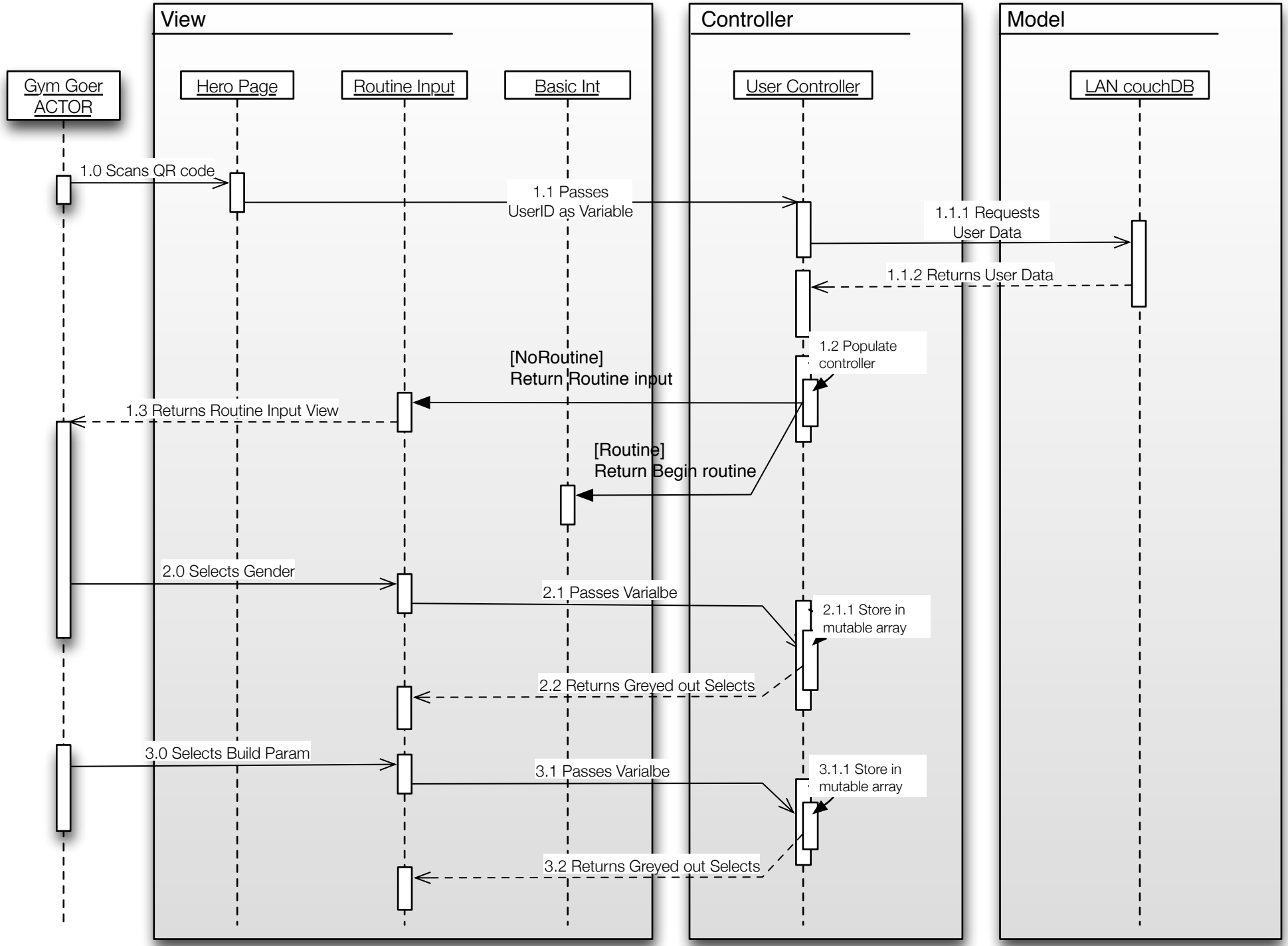

Basic Interaction
Scan QR
Check Active Status
Active Status set to 0
x +1
ExerciseID = RoutineArr[x]
ExerciseID = RoutineArr.length
ExerciseID Animation Displayed
Animation times out
<uses>
User selects 'gone to do it'
Gym Goer
Set user to Active
<extends>
Connect to LAN CouchDB
Set Active to 1 for userID
x = - 1
End of Day
<extends>
End of Day
Set Active to 0 for userID
Displays Daily Stats

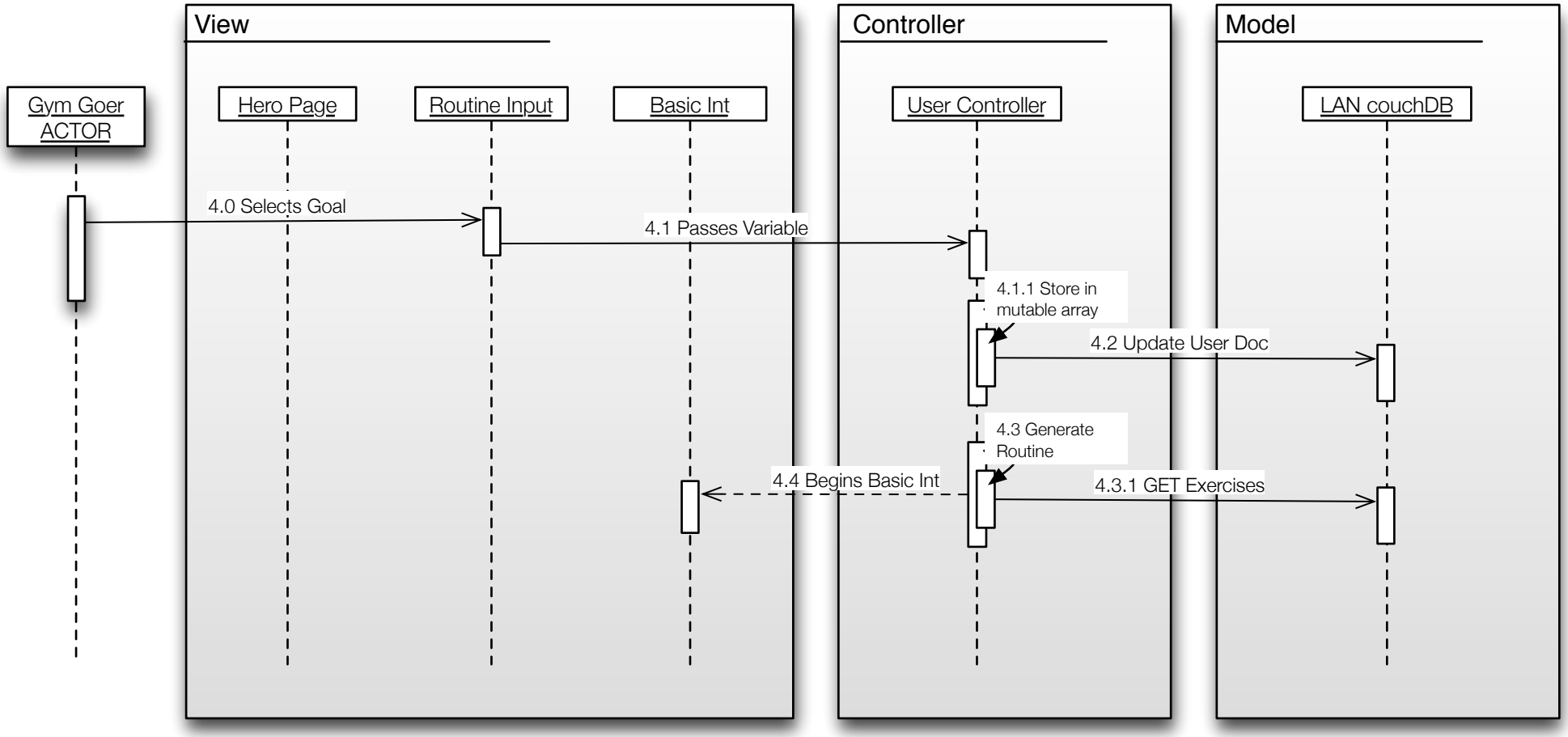

Selecting to Review Previous
User Selects Previous Exercise
x = x - 1
If x = 1
<extends>
x = 0 and remove 'go back' option
ExerciseID = RoutineArr[x]
ExerciseID animation
Gym Goer

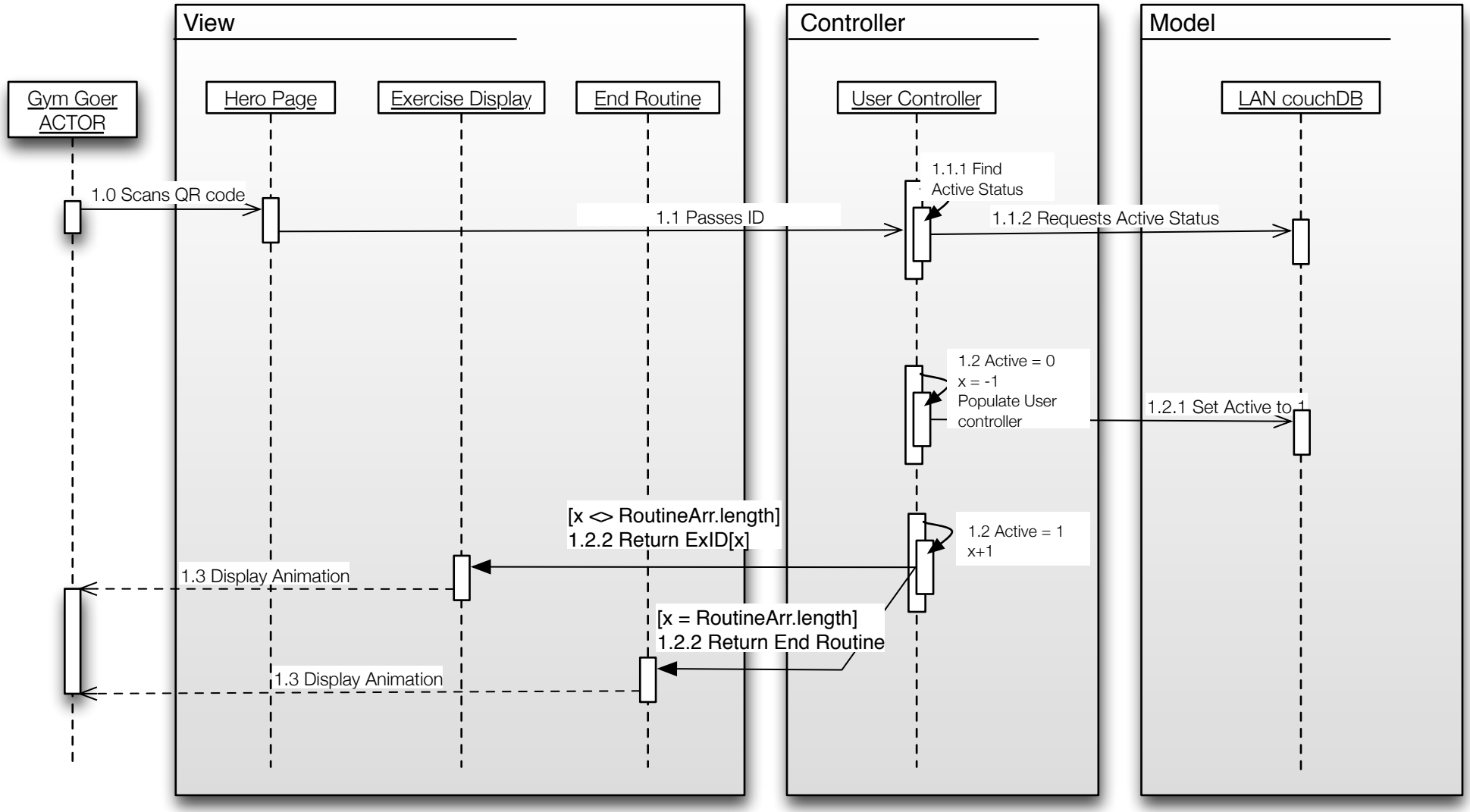

Routine Changing
Scan QR
System meets
Question Condition
Simple
Question Asked
<uses>
Answer used to effect
personalised goals
Next exercise
displayed
Gym
Goer
Conditional Questions
Instances to ask
1st time performing exercise
Outside of accepted variance (time)
Didn't return to the iPad
Instances to suppress asking
Asked a question on previous exercise

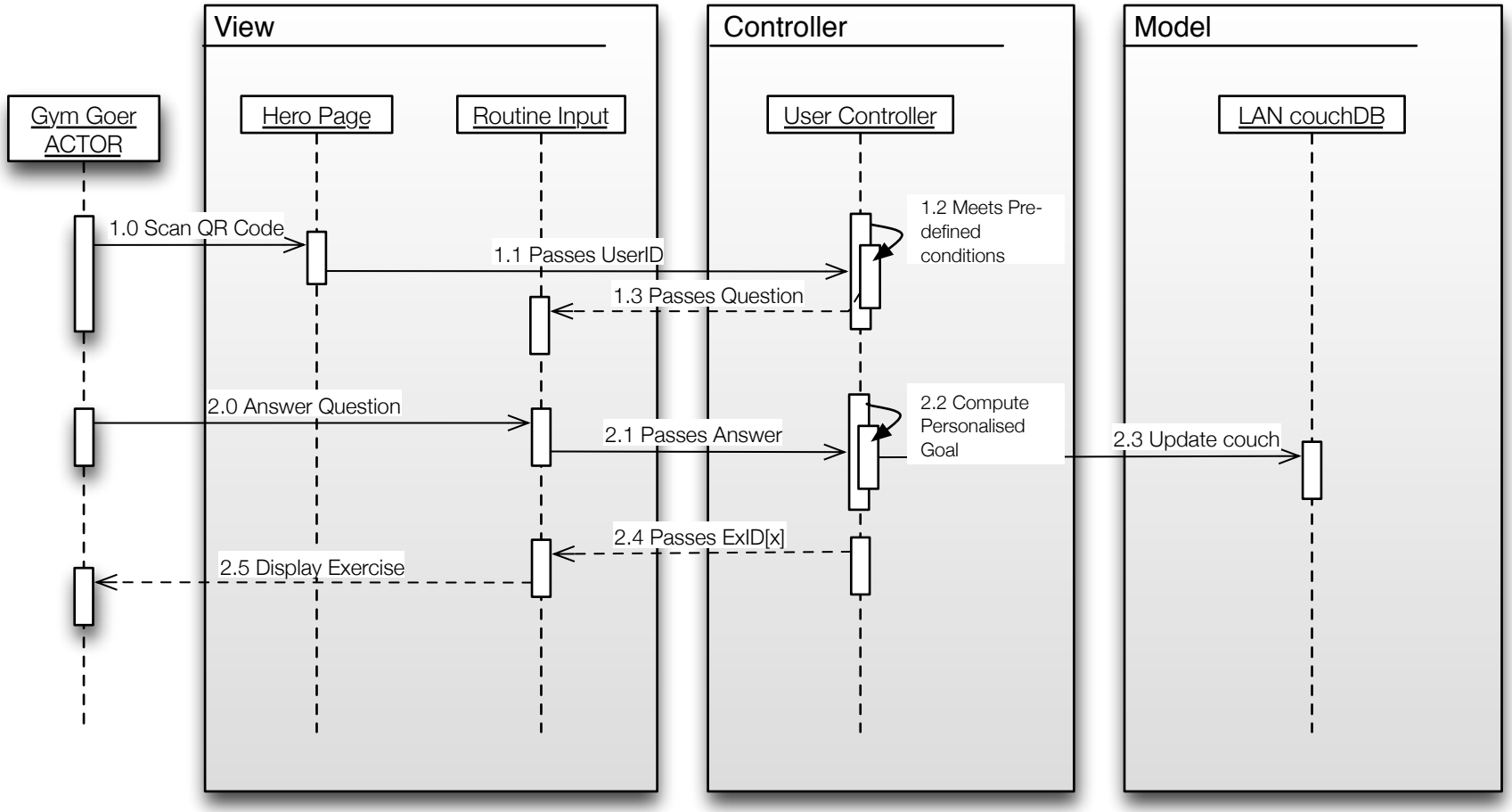

Routine Personalisation
Event Loop
On selected exercise set Active to 0 in user RoutineArr
Select new exercise form physiology document and set active to 1
Gym Goer

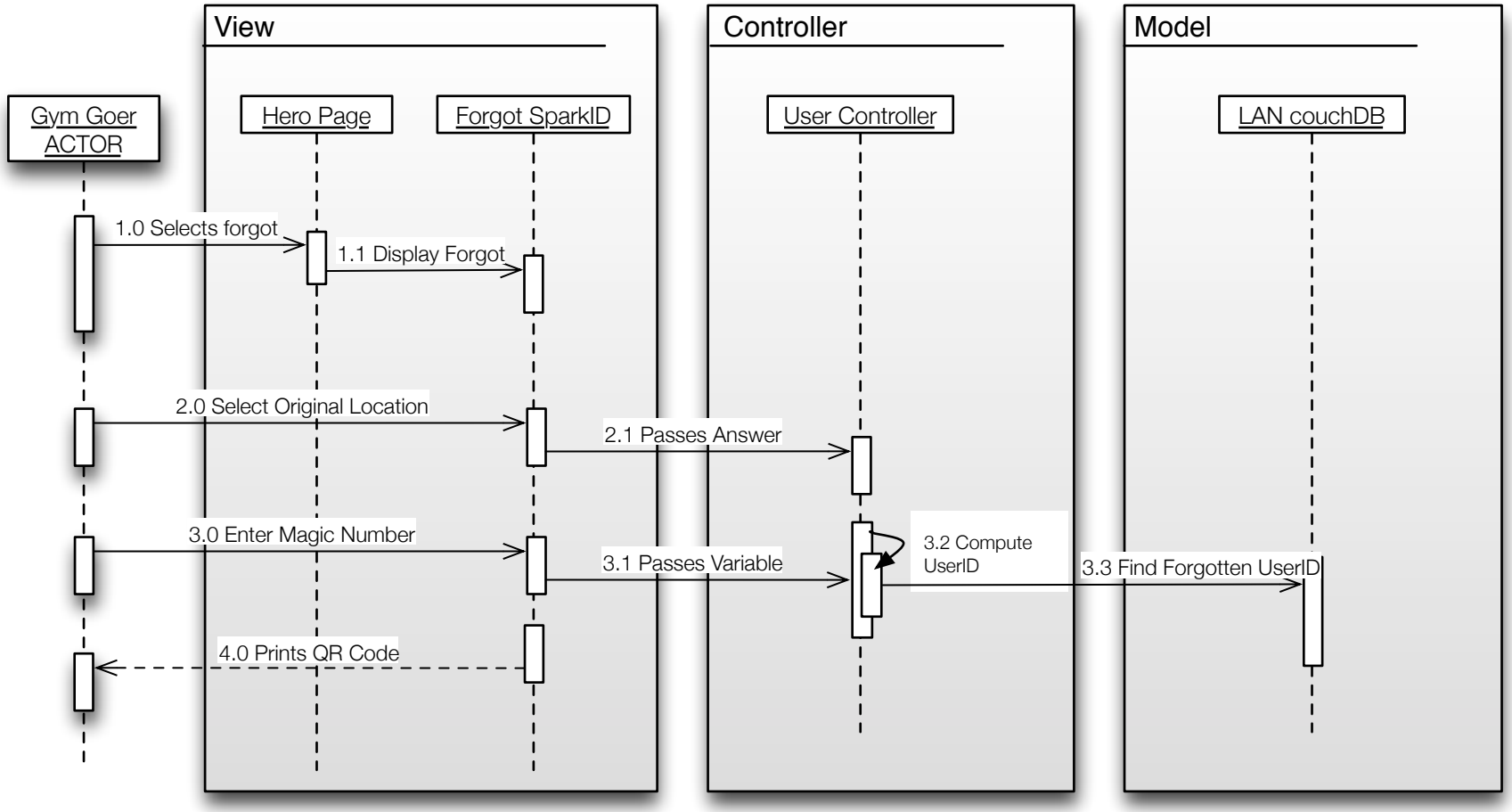

View
Controller
Model
Gym Goer
ACTOR
Hero Page
Registration
User Controller
LAN couchDB
1.0 Selects Register
1.1 Request
Register View
1.1.1 Returns Registration View
2.0 Input DOB
2.1.1 oper
(populate
mutable Obj)
2.1 Pass DOB
3.0 Selects Magic Number
3.1.1 oper
(populate
mutable Obj)
3.1 Pass Magic Num
3.1.2 oper
(Compute UID)
3.2.1 oper
(Insert UID into
new doc)
3.2 Pass UID
3.2.4 Passes Success
3.2.3 Passes Success
3.2.2 Passes Success

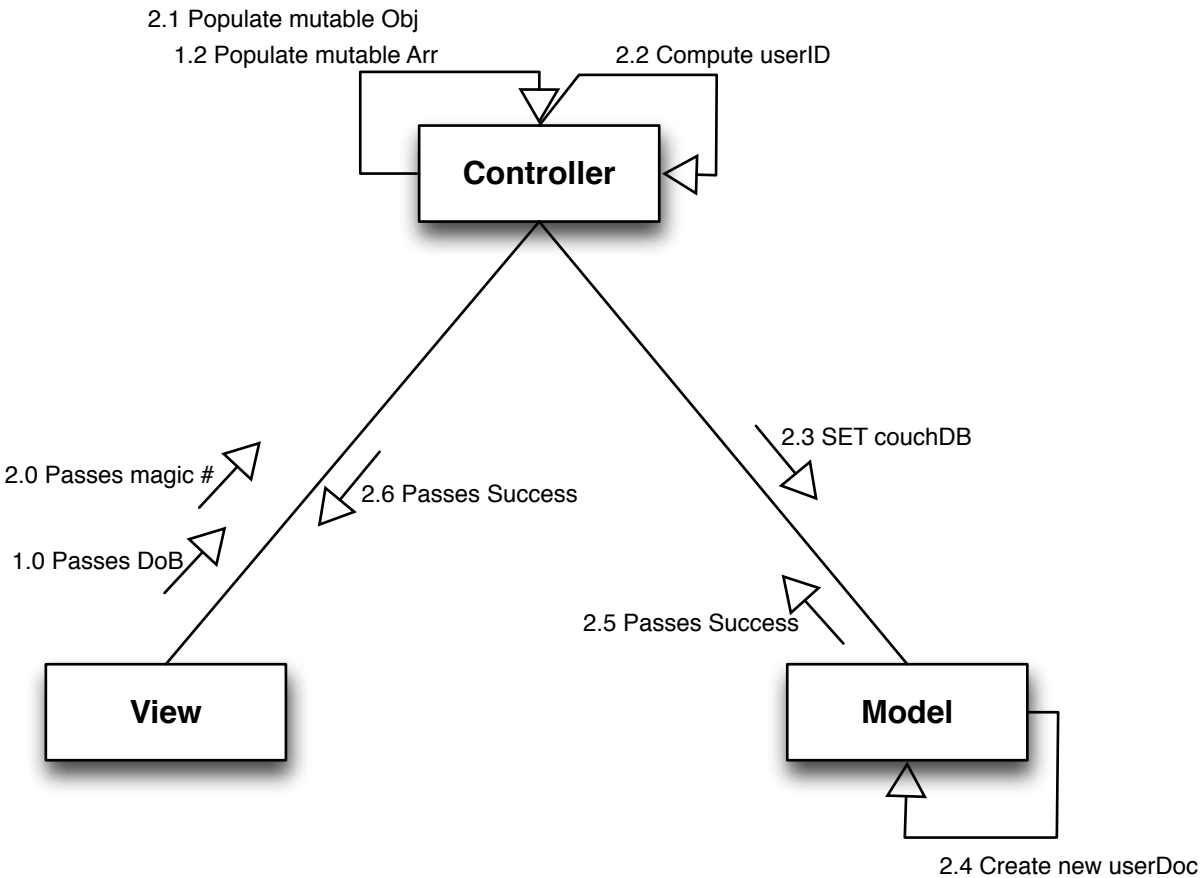

View
Controller
Model
Gym Goer
ACTOR
Hero Page
Routine Input
Basic Int
User Controller
LAN couchDB
1.0 Scans QR code
1.1 Passes
UserID as Variable
1.1.1 Requests
User Data
1.1.2 Returns User Data
1.2 Populate
controller
[NoRoutine]
Return Routine input
1.3 Returns Routine Input View
[Routine]
Return Begin routine
2.0 Selects Gender
2.1 Passes Varialbe
2.1.1 Store in
mutable array
2.2 Returns Greyed out Selects
3.0 Selects Build Param
3.1 Passes Varialbe
3.1.1 Store in
mutable array
3.2 Returns Greyed out Selects

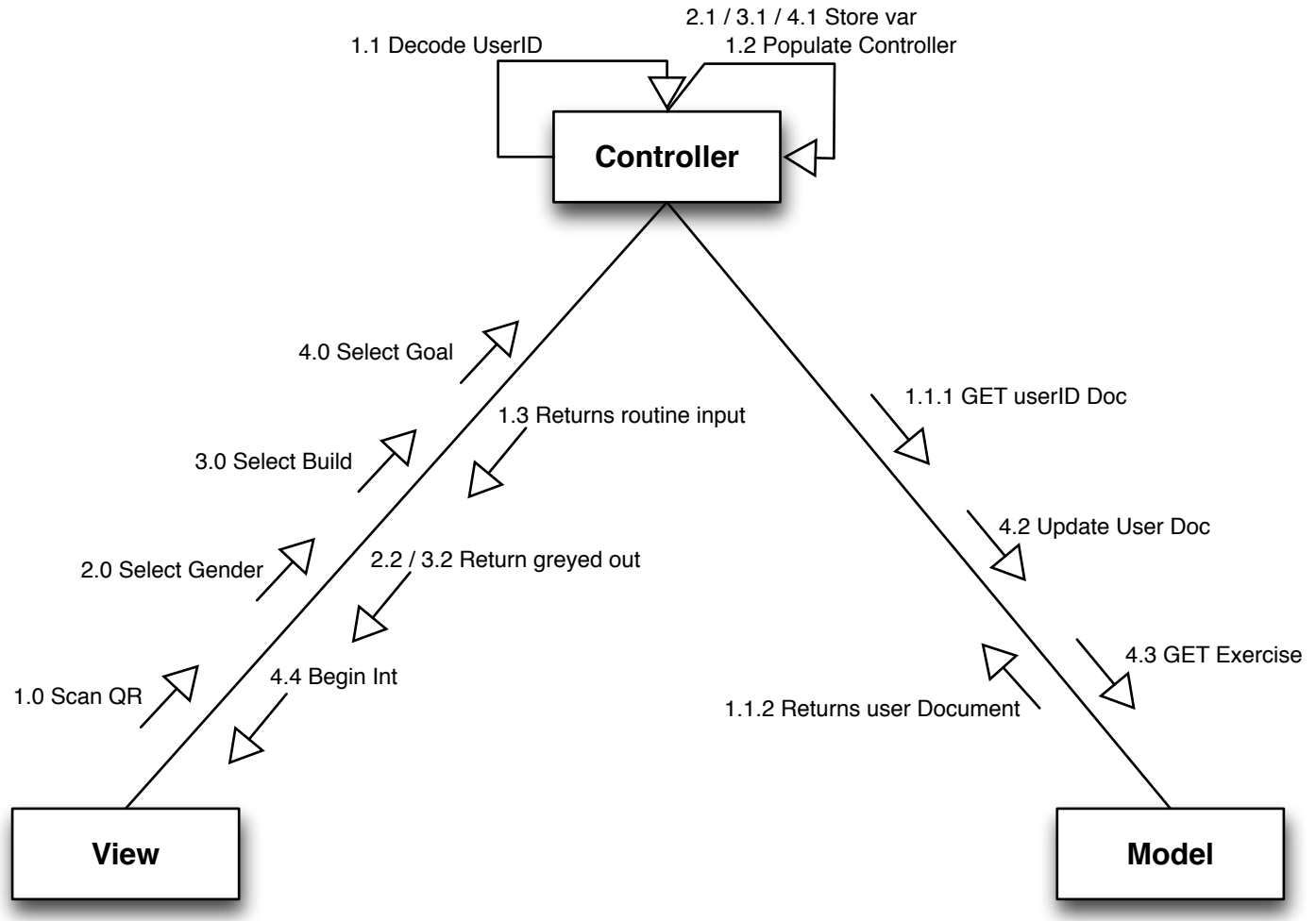

View
Controller
Model
Gym Goer
ACTOR
Hero Page
Routine Input
Basic Int
User Controller
LAN couchDB
4.0 Selects Goal
4.1 Passes Variable
4.1.1 Store in
mutable array
4.2 Update User Doc
4.3 Generate
Routine
4.4 Begins Basic Int
4.3.1 GET Exercises

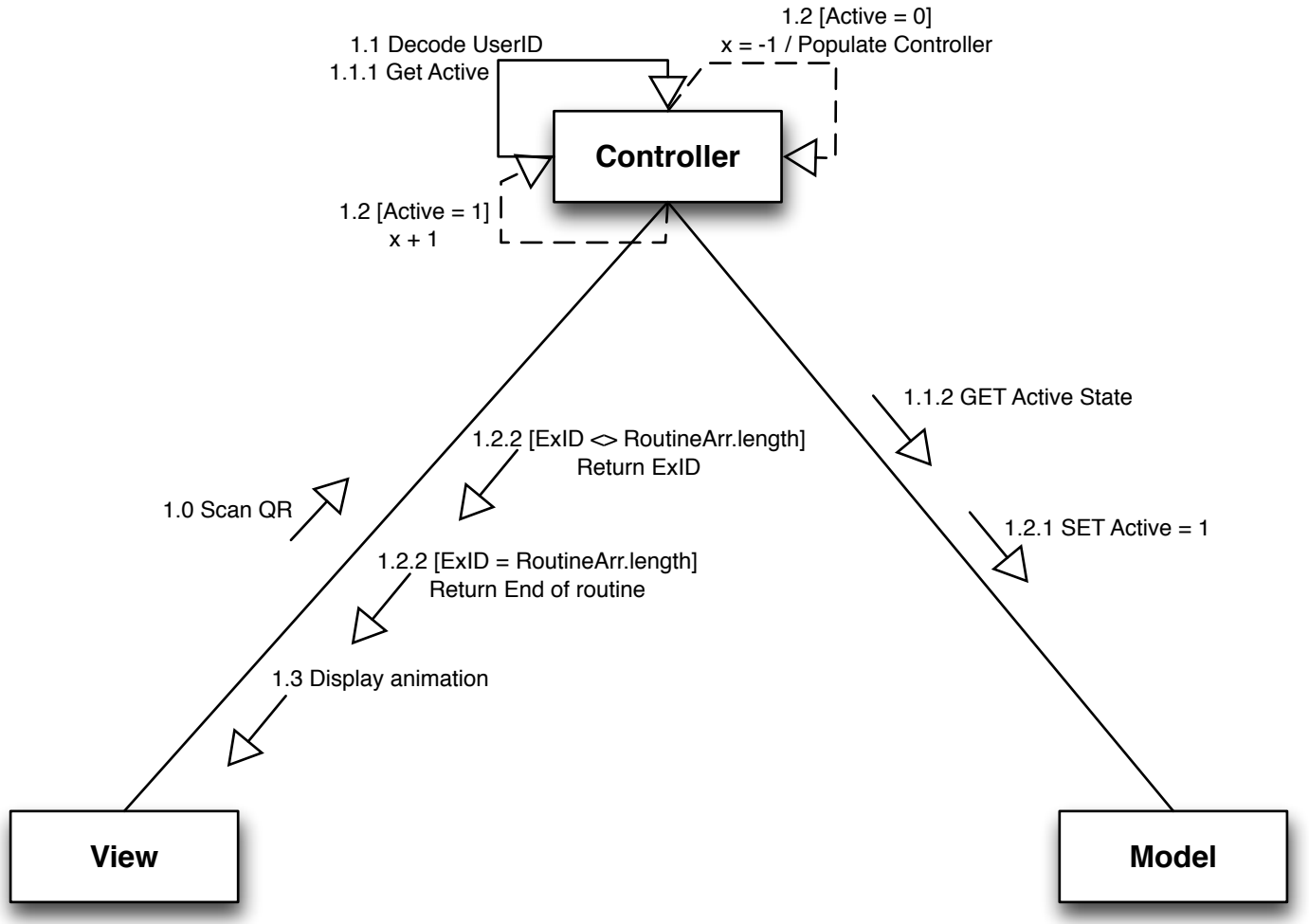

View
Controller
Model
Gym Goer
ACTOR
Hero Page
Exercise Display
End Routine
User Controller
LAN couchDB
1.0 Scans QR code
1.1 Passes ID
1.1.1 Find
Active Status
1.1.2 Requests Active Status
1.2 Active = 0
x = -1
Populate User
controller
1.2.1 Set Active to -1
[x <> RoutineArr.length]
1.2.2 Return ExID[x]
1.2 Active = 1
x+1
1.3 Display Animation
[x = RoutineArr.length]
1.2.2 Return End Routine
1.3 Display Animation

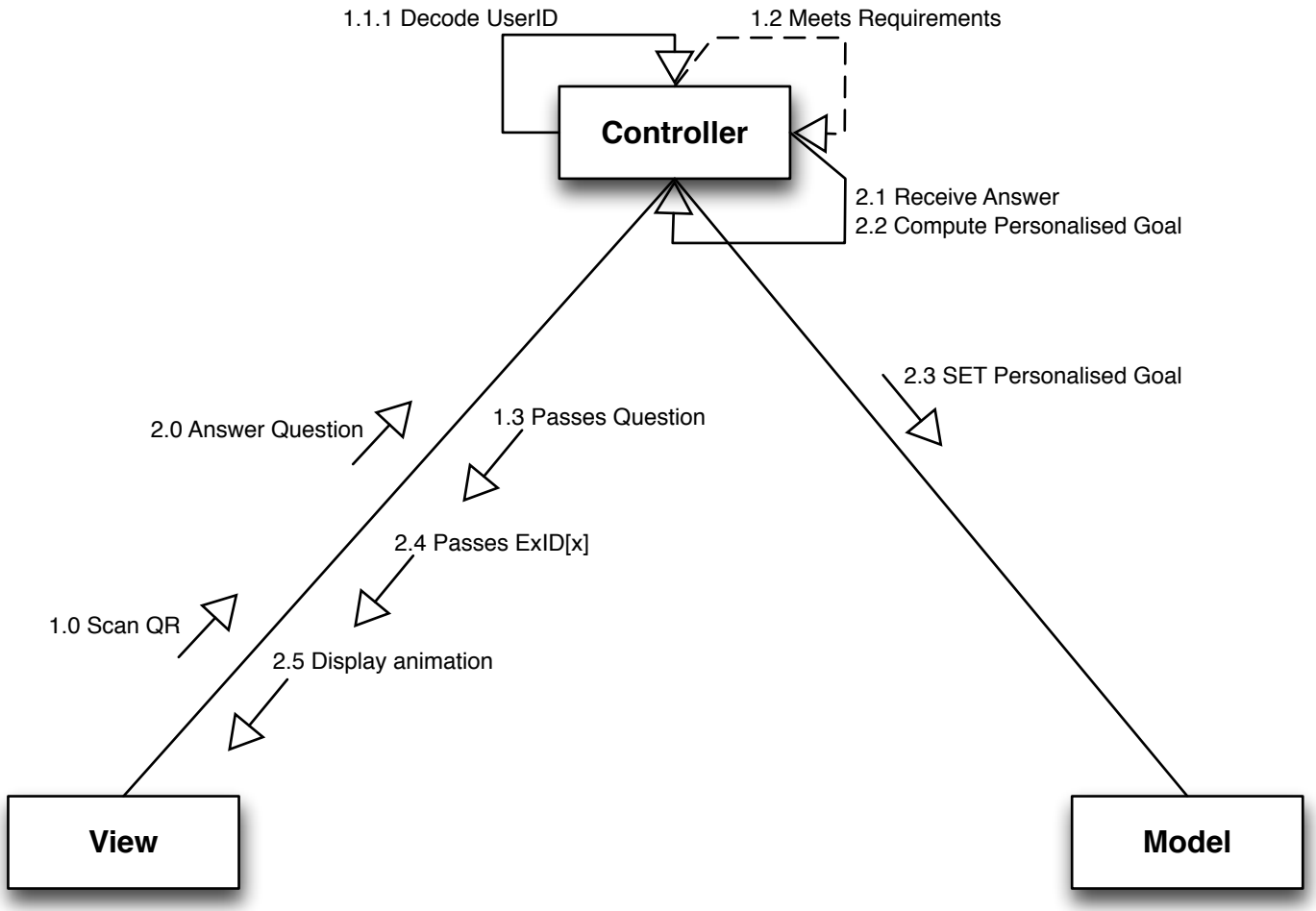

View
Controller
Model
Gym Goer
ACTOR
Hero Page
Routine Input
User Controller
LAN couchDB
1.0 Scan QR Code
1.1 Passes UserID
1.2 Meets Pre-defined conditions
1.3 Passes Question
2.0 Answer Question
2.1 Passes Answer
2.2 Compute Personalised Goal
2.3 Update couch
2.4 Passes ExID[x]
2.5 Display Exercise

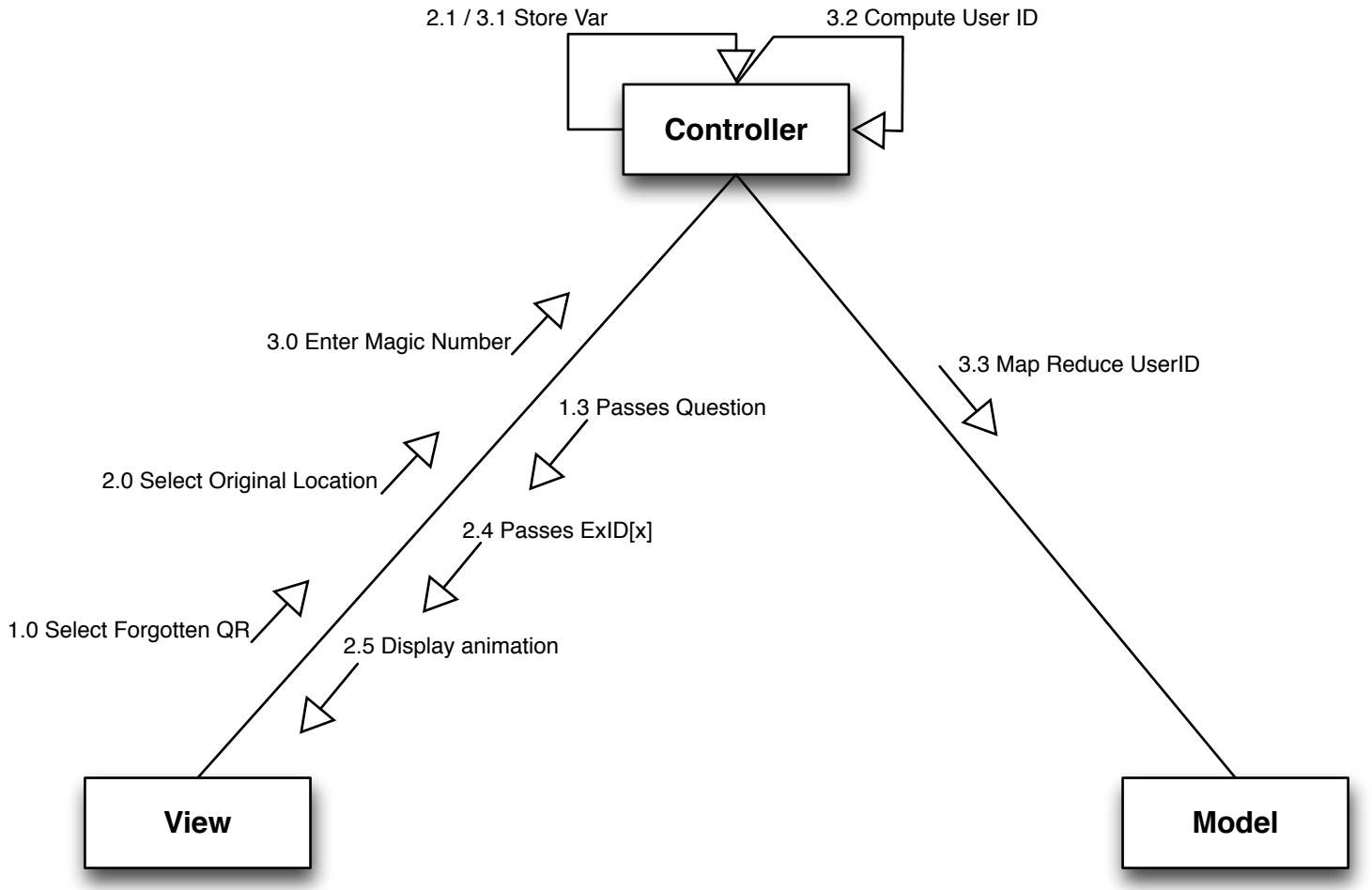

View
Controller
Model
Gym Goer
ACTOR
Hero Page
Forgot SparkID
User Controller
LAN couchDB
1.0 Selects forgot
1.1 Display Forgot
2.0 Select Original Location
2.1 Passes Answer
3.0 Enter Magic Number
3.1 Passes Variable
3.2 Compute
UserID
3.3 Find Forgotten UserID
4.0 Prints QR Code


2.1 Populate mutable Obj
1.2 Populate mutable Arr
2.2 Compute userID
Controller
2.3 SET couchDB
2.0 Passes magic #
2.6 Passes Success
1.0 Passes DoB
2.5 Passes Success
View
Model
2.4 Create new userDoc


2.1 / 3.1 / 4.1 Store var
1.1 Decode UserID
1.2 Populate Controller
Controller
4.0 Select Goal
1.3 Returns routine input
1.1.1 GET userID Doc
3.0 Select Build
4.2 Update User Doc
2.0 Select Gender
2.2 / 3.2 Return greyed out
4.3 GET Exercise
1.0 Scan QR
4.4 Begin Int
1.1.2 Returns user Document
View
Model


1.2 [Active = 0]
x = -1 / Populate Controller
1.1 Decode UserID
1.1.1 Get Active
Controller
1.2 [Active = 1]
x + 1
1.1.2 GET Active State
1.2.2 [ExID <> RoutineArr.length]
Return ExID
1.0 Scan QR
1.2.1 SET Active = 1
1.2.2 [ExID = RoutineArr.length]
Return End of routine
1.3 Display animation
View
Model


1.1.1 Decode UserID
1.2 Meets Requirements
Controller
2.1 Receive Answer
2.2 Compute Personalised Goal
2.3 SET Personalised Goal
2.0 Answer Question
1.3 Passes Question
2.4 Passes ExID[x]
1.0 Scan QR
2.5 Display animation
View
Model


2.1 / 3.1 Store Var
3.2 Compute User ID
Controller
3.0 Enter Magic Number
3.3 Map Reduce UserID
1.3 Passes Question
2.0 Select Original Location
2.4 Passes ExID[x]
1.0 Select Forgotten QR
2.5 Display animation
View
Model