

Requirements Traceability – Team 3.02

Introduction:

Traceability is the ability to trace a project element to other related project elements, especially those related to [requirements](#). The project elements which are involved in traceability are called [traceability items](#). Typical traceability items include different [types of requirements](#), analysis and design model elements, [test artifacts](#) ([test suites](#), [test cases](#), etc.), and [end-user support documentation and training material](#), as shown in the figure below.

Purpose of Traceability

The purpose of establishing **traceability** is to help:

- Understand the source of requirements
- Manage the scope of the project
- Manage changes to requirements
- Assess the project impact of a change in a requirement
- Assess the impact of a failure of a test on requirements (i.e. if test fails the requirement may not be satisfied)
- Verify that all requirements of the system are fulfilled by the implementation.
- Verify that the application does only what it was intended to do.

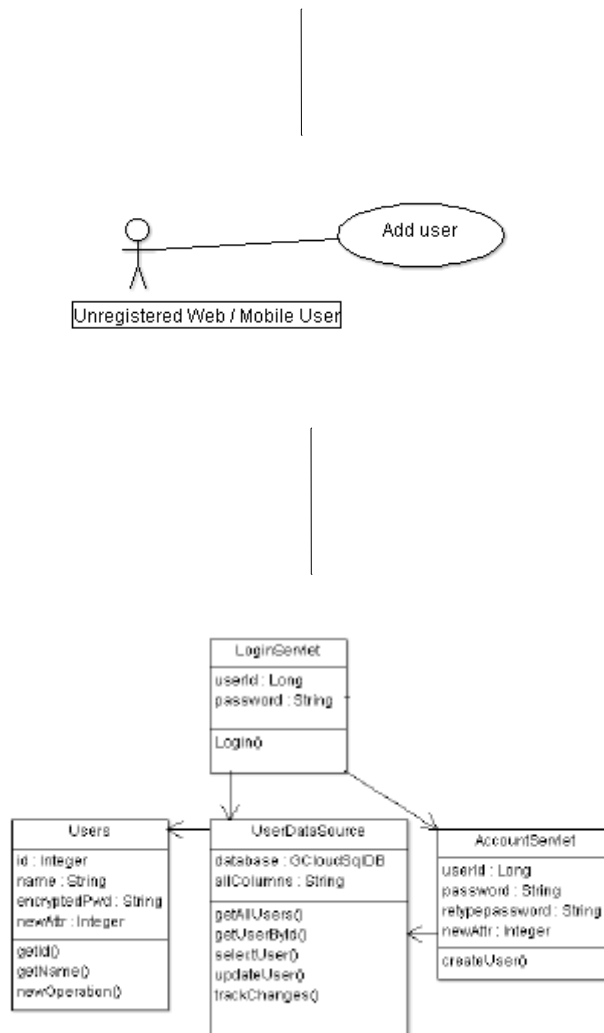
Traceability helps you understand and manage how input to the requirements, such as [Business Rules](#) and [Stakeholder Requests](#), are translated into a set of key stakeholder/user needs and system features, as specified in the [Vision](#) document. The [Use-Case model](#), in turn, outlines the how these features are translated to the functionality of the system

Typical Traceability

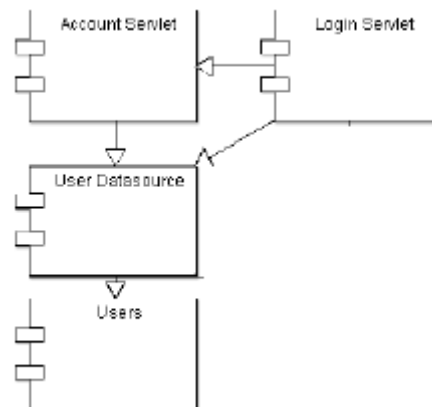
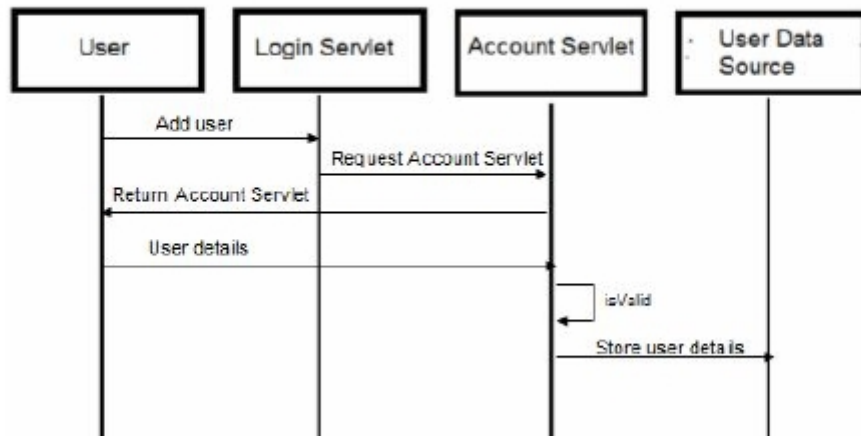
The most important traceability items are:

User/Stakeholder Needs and requirement (from Vision, may be further traced to individual Stakeholder Requests)
Traced to a particular use case section (from UseCase Model).
Traced to class diagram (from the analysis models)
To sequence diagram from design model
To component diagram from implementation model.
To Test Case ID (As mentioned in Test Plan)

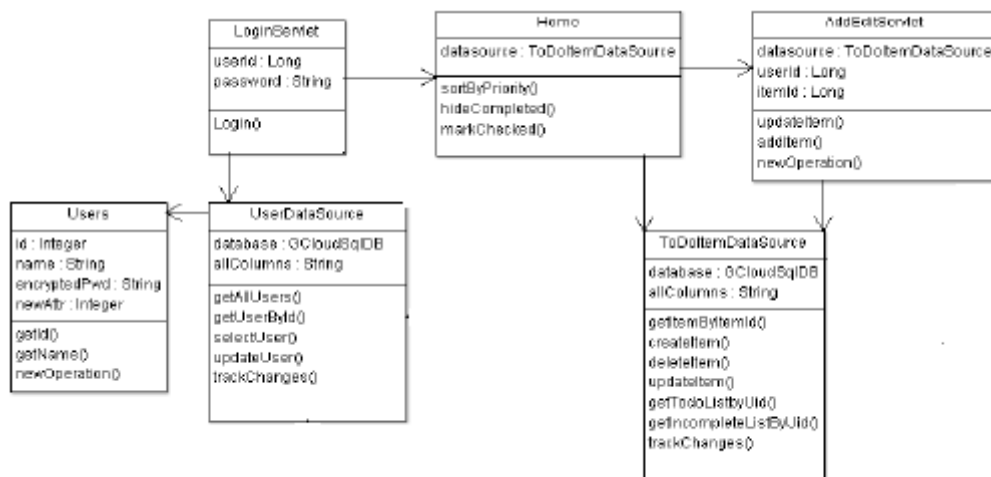
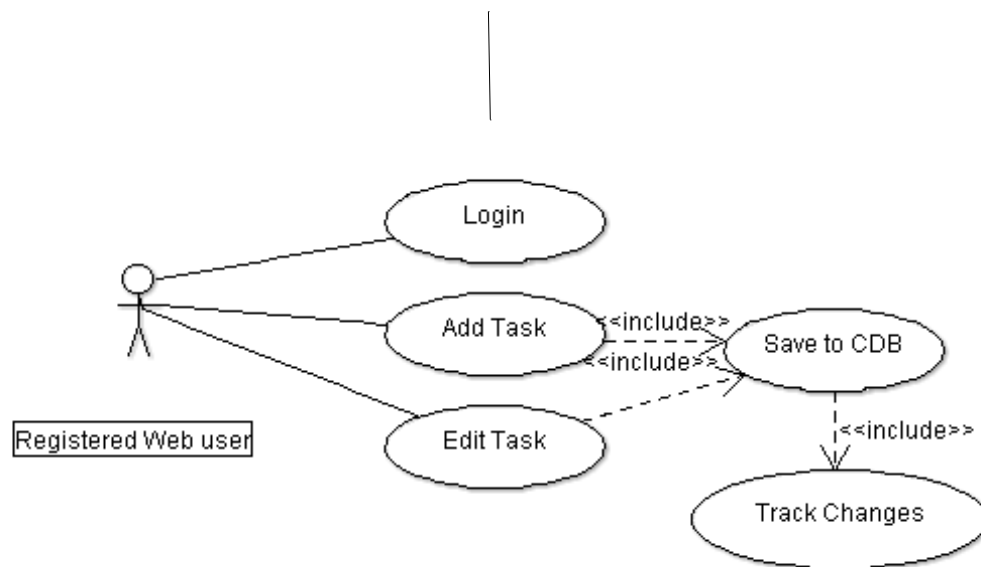
Traceability 1: From Use Case Scenario “Registration” to Test Cases:

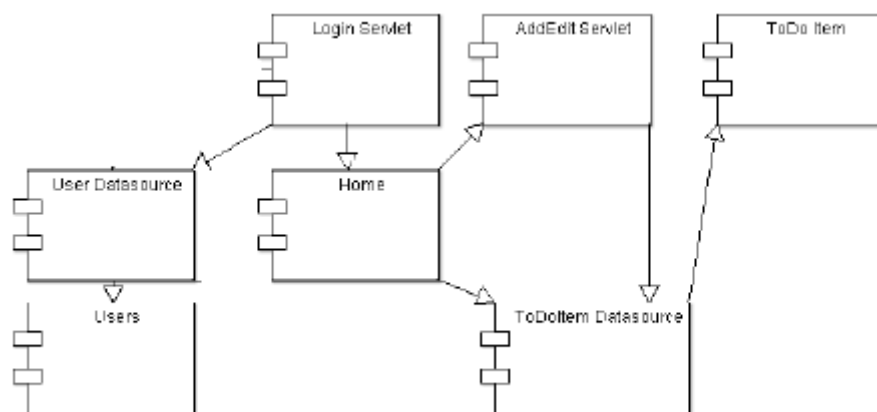
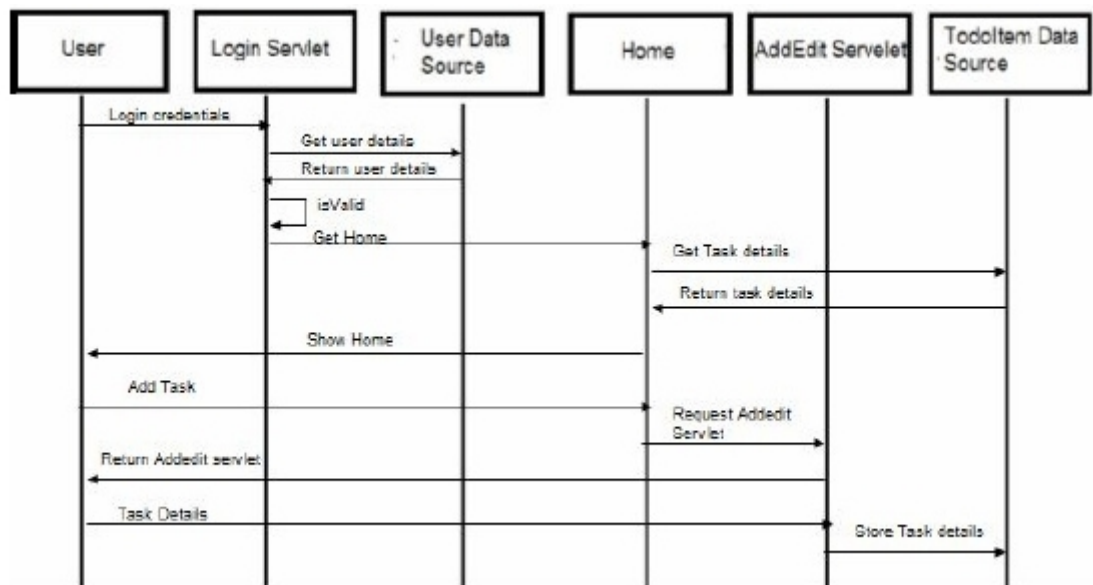


Add User

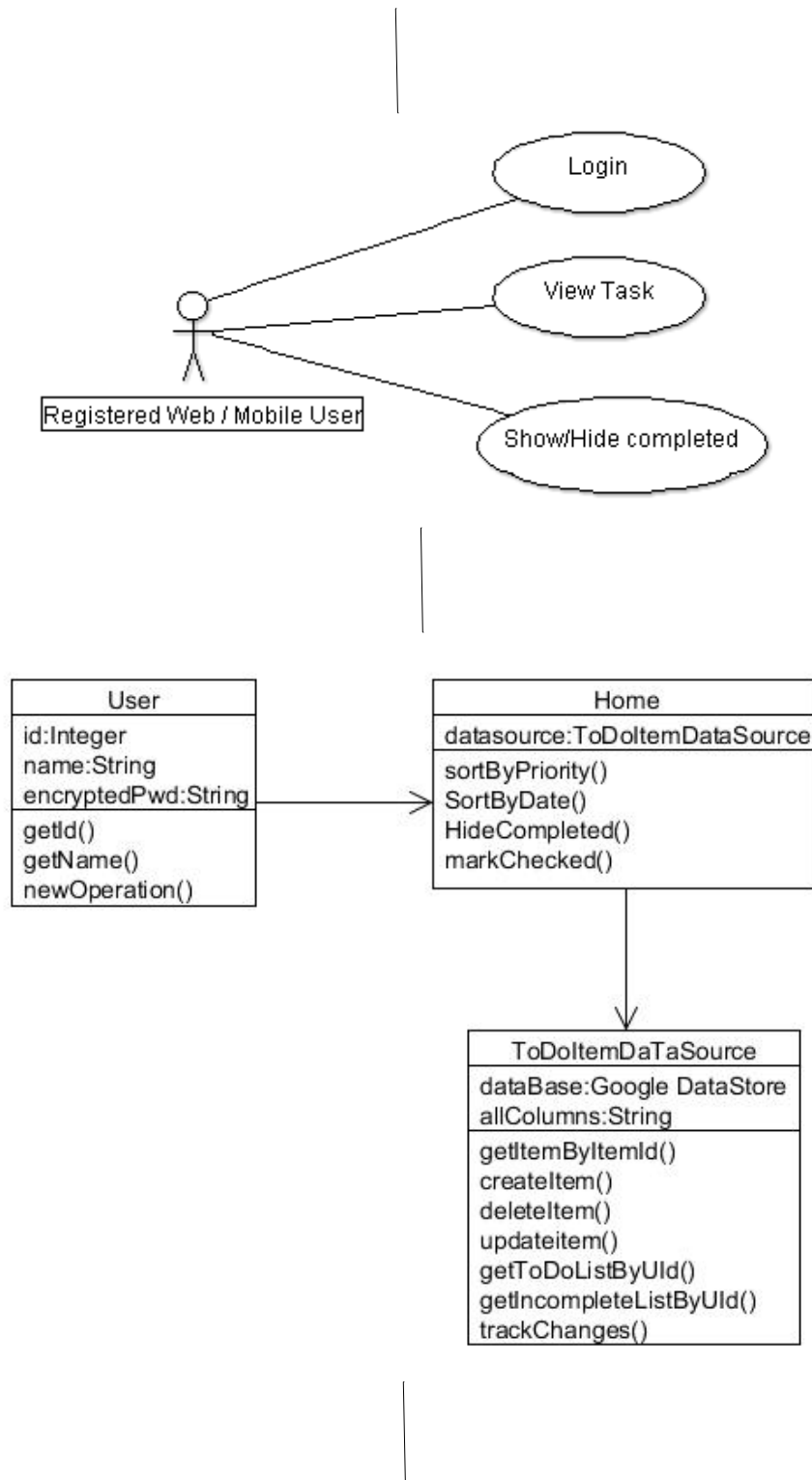


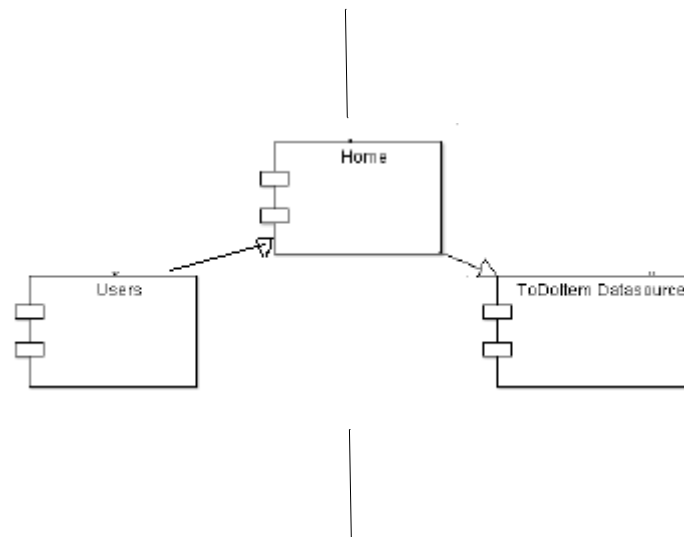
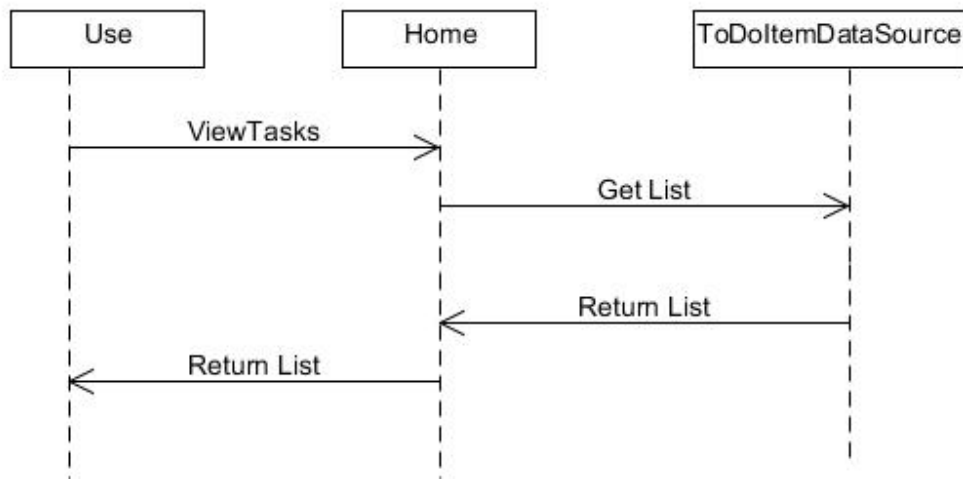
Traceability 2 : From Use Case Scenario “Add/Edit Tasks” to Test Cases:





Traceability 3 : From Use Case Scenario “View Tasks” to Test Cases:





Traceability 4 : From Use Case Scenario “Delete” to Test Cases:

