**Event**

**Manager**

**2017**

Mobile App Documentation

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Università degli Studi di Napoli Federico II – Corso di laurea di Scienze Informatiche

Software Engeneering Project

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# **Requirements Analysis Document**

1.1. Requirements Elicitation

* **INTERVIEW n.1**

STAKEHOLDER: Prof. Sergio Di Martino

Control officers have mobile devices for accesses validation. The system provides to give and manage an account for each of them.

Each device, connected to a central server, validates a customer’s ticket by scanning its QR code.

Whenever the QR scanning succeeds, the application must show the linked event’s details

* **INTERVIEW n.2**

STAKEHOLDER: Prof. Sergio Di Martino

It is important for the service to be reliable and fast.

1.2 Requirement Analysis

1.2.1 Use case diagram

Android application

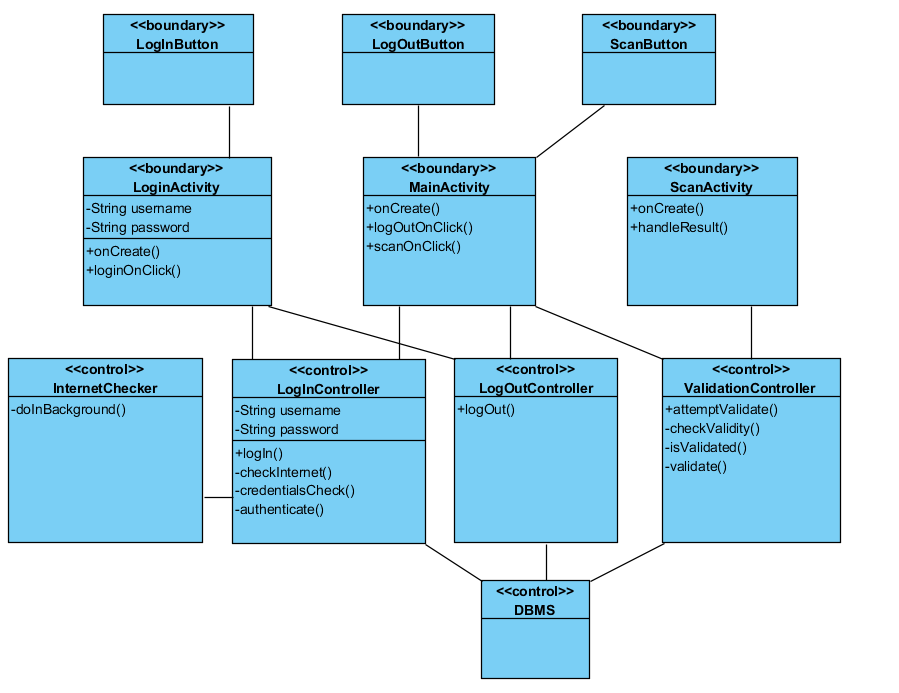
Controller DBMS

1.2.2 Use Case Description (Cockburn’s template)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| #1 | Log In |  |  |  |
| *Goal in context* | The controller accesses his account on the application | | | |
| *Success End Condition* | The controller succeeds to log in | | | |
| *Fail End Condition* | The controller fails to log in | | | |
| *Primary actor* | Controller | | | |
| *Trigger* | The controller presses the “Log In” button on the app | | | |
| DESCRIPTION | **STEP N°** | **CONTROLLER** | **SYSTEM** | |
|  | 1 | Writes username and password and presses Log In [LOGIN] |  | |
| 2 |  | Shows scan page [HOME] | |
| SUBVARIATION #1 | **STEP N°** | **CONTROLLER** | **SYSTEM** | |
|  | 1 | Fails to match user and password and presses Log In [LOGIN] |  | |
| 2 |  | Shows the same page but displays a “mismatch user-password” message [LOGIN] | |

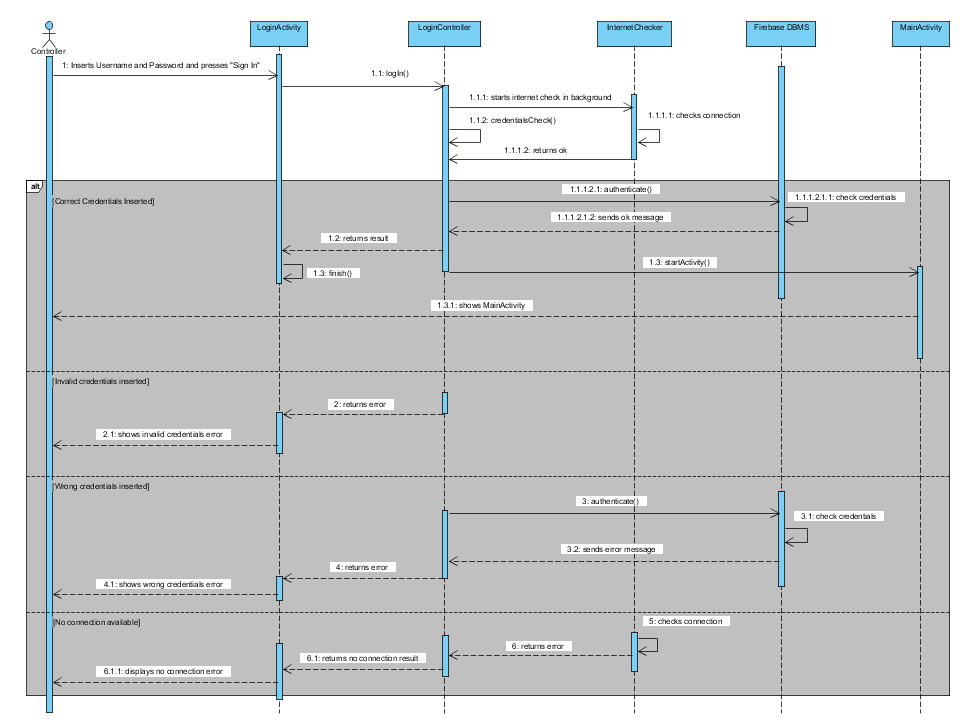
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| #2 | Scan and validate | | |  | |
| *Goal in context* | The controller scans and validate a ticket | | | |
| *Preconditions* | The controller must be logged in | | | |
| *Success End Condition* | The ticket gets validated | | | |
| *Fail End Condition* | The ticket cannot be validated | | | |
| *Primary actor* | Controller | | | |
| *Trigger* | The controller presses “SCAN” button | | | |
| DESCRIPTION | **STEP N°** | **CONTROLLER** | **SYSTEM** | |
|  | 1 | Presses “SCAN” button [HOME] |  | |
| 2 |  | Shows scanning page [SCAN] | |
| 3 | Frames the QR-Code [SCAN] |  | |
| 4 |  | Validates the QR | |
| 5 |  | Shows a feedback (“QR OK”) and the transaction’s data [SCAN DONE] | |
| 6 | Press the “Scan Again” button [SCAN DONE] |  | |
| 7 |  | Shows scanning page [SCAN] | |
| SUBVARIATION #1 | **STEP N°** | **CONTROLLER** | **SYSTEM** | |
|  | 4 |  | Fails to validate the QR | |
| 5 |  | Displays an error message [SCAN FAILURE] | |
| 6 | Press the “Scan Again” button [SCAN FAILURE] |  | |
| 7 |  | Shows scanning page [SCAN] | |
| EXTENSION #1 | **STEP N°** | **CONTROLLER** | **SYSTEM** | |
|  | 3 | Presses “Back” button [SCAN] |  | |
| 4 |  | Shows home page [HOME] | |
| EXTENSION #2 | **STEP N°** | **CONTROLLER** | **SYSTEM** | |
|  | 1 | Presses “Log Out” button [HOME] |  | |
| 2 |  | Shows Log In page [LOGIN] | |

1.2.3 Class Diagram (Analysis)

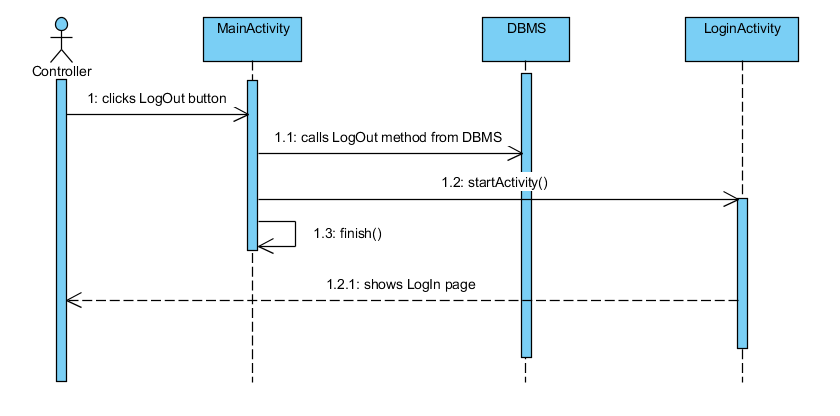


1.2.4 Sequence Diagram

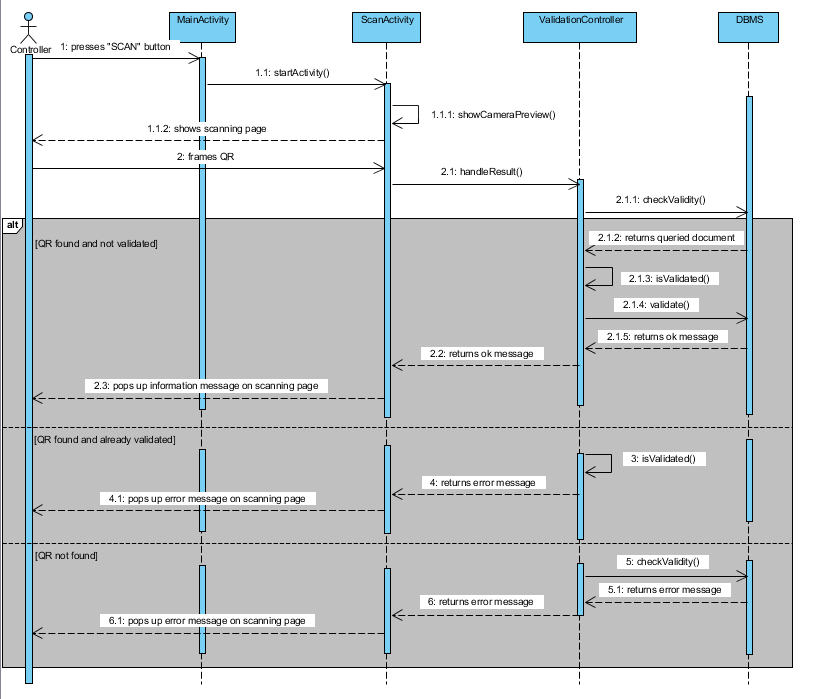
Use Case #1: Log In



Use Case #2: Log Out

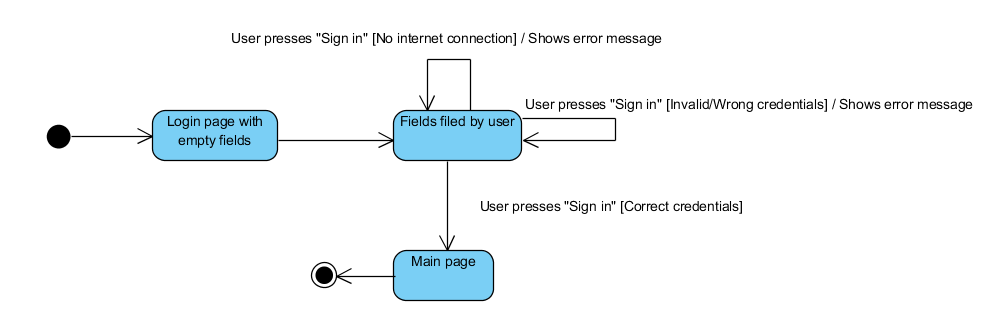


Use Case #3: Scan and Validate

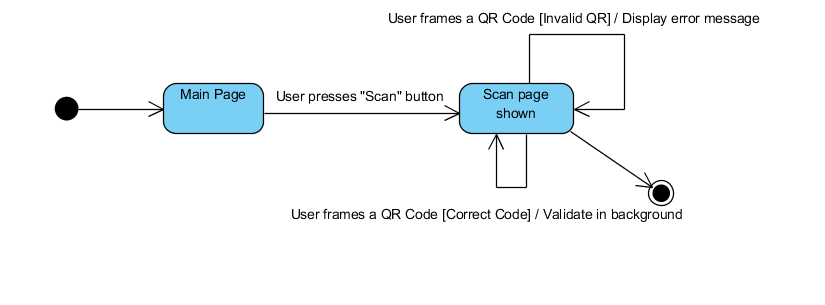


1.2.5 Statechart Diagram

Statechart #1: Log In



Statechart #2: Scan and Validate



Statechart #3: Log Out

