PROJECT 2022

1

Objective

Implement and demonstrate a prototype of
an *Inventory Management System* (IMS)
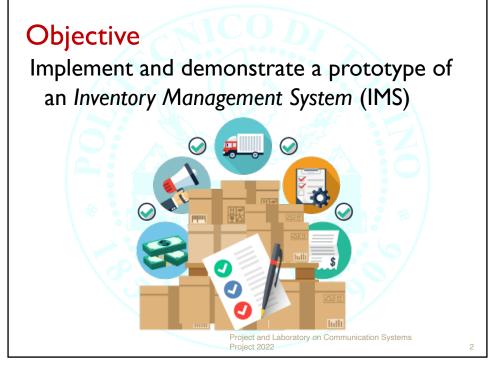
2

Requirements

Keep track of items in a *generic* inventory

- Description
- Location
- Add/Remove
- Borrow/Return
- Sell/Buy

Project and Laboratory on Communication Systems
Project 2022   3

3

Requirements

The system must be designed to be
adaptable to different scenarios:

- Library (e.g., school library)
- Laboratory (e.g., LED)
- Small shops
- Company (e.g., DET)
- ….

Project and Laboratory on Communication Systems
Project 2022   4

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Requirements

The system's User Interfaces (UI's) will be:

- Web
- Dedicated device (totem)
- Smartphone

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Web UI

Three different users:

- Administrator
- Operator
- Customer

System Access rights

Authentication thru:

- Username/password (mandatory)
- Social profile (Optional)
- Certificate (to get 30L …)

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Totem UI

Two different users:

- Operator
- Customer

Authentication thru :

- Username/password (mandatory)
- RFID (mandatory)
- Smartphone (again, to get 30L …)

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Smartphone UI

Two different users:

- Operator
- Customer

First time authentication thru:

- Username/password (mandatory)
- RFID (mandatory)

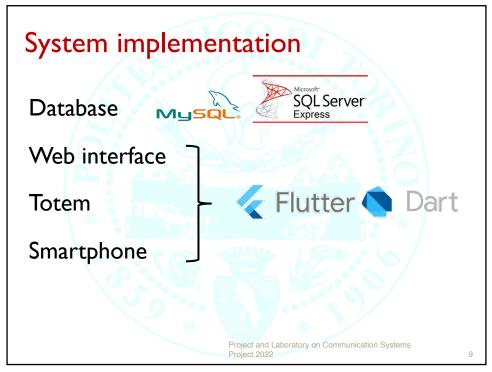Thereafter use smartphone authentication:

- PIN
- Biometrical data (fingerprint, face scan, …)

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System implementation

Database

Web interface

Totem

Smartphone

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Mandatory (max score 24/30)

Database

Totem

10

Intermediate (max score 27/30)

Database

Web interface

Totem

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Full-fledged (max score 30L/30)

Database

Web interface

Totem

Smartphone

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