iMuse Mobile Tour

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Greece

Mobile Tour Goals

- Provide a personal assistant for each visitor
- Provide map out route functionality
- Support educational programs
- Support multilingual, multimedia, user centric content.

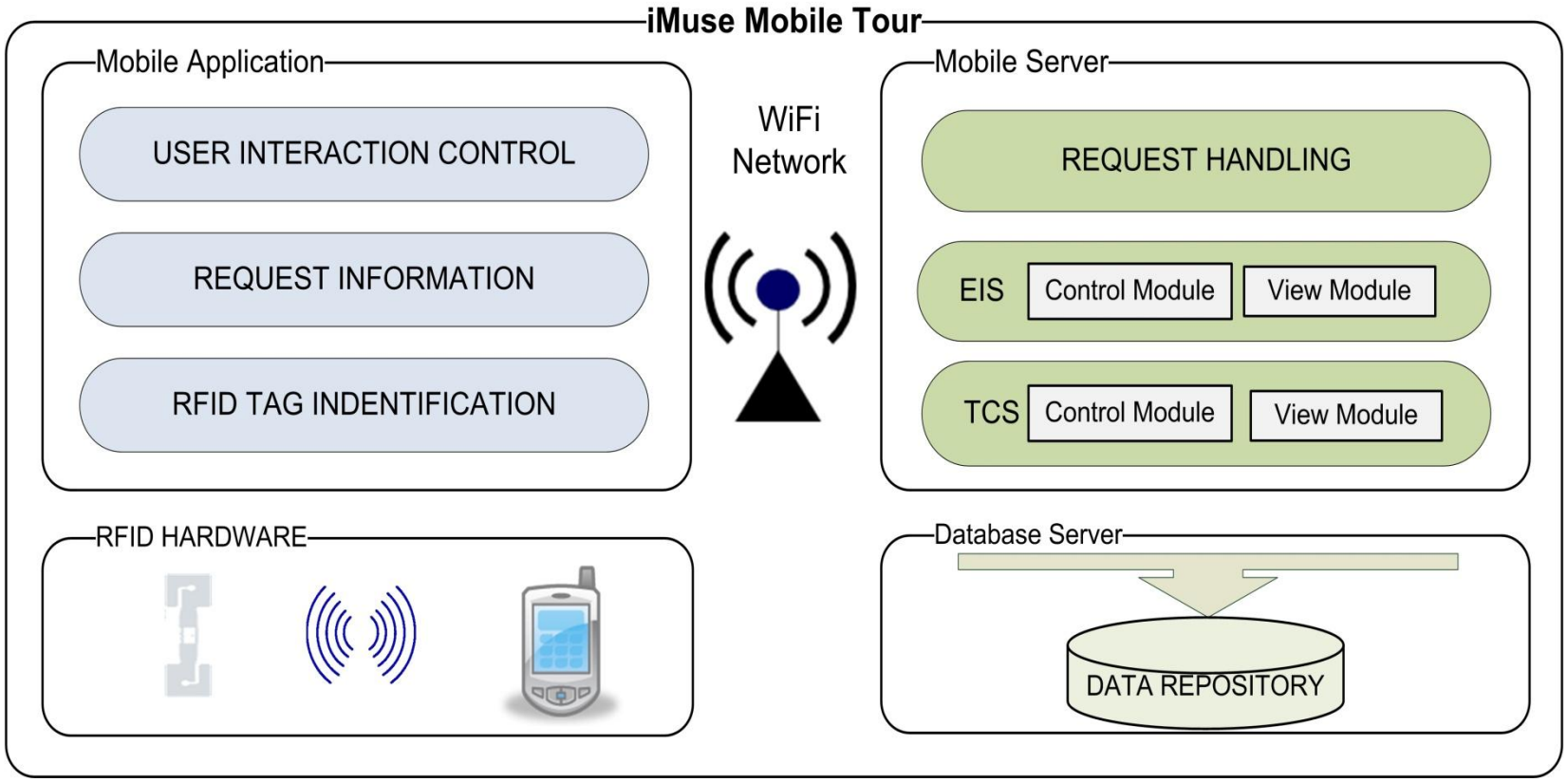
RFID Reader Technology

- Utilization of UHF RFIDs for enhancing visitor's experience
- iDtronic UHF Gun RFID Reader
- Reading Distance 2m
- Lightweight (320gr)
- Windows CE 5.0, Reader, Library (.NET v2.0), eVC++, C#

RFID Sensors

- Dogbone UHF RFID Tags
- An RFID sensor (tag) for each showcase

Mobile Tour Architecture



Mobile Tour Development

- Mobile client
  - RFID Reader interaction & control
  - Request formulation as Physical Hyperlinks
  - Tour information representation
  - C# development, .NET library by reader's manufacturer
- Server application
  - Business logic implementation
  - MVC architecture
  - PHP, JavaScript, C++

Mobile Tour- Free Tour

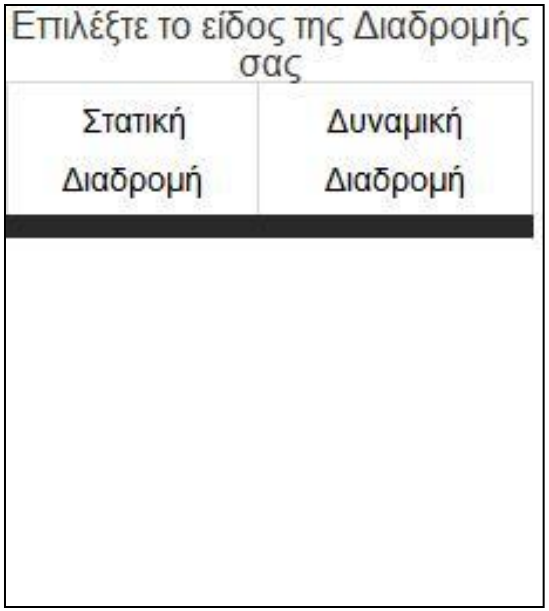
(a) (b) (c)

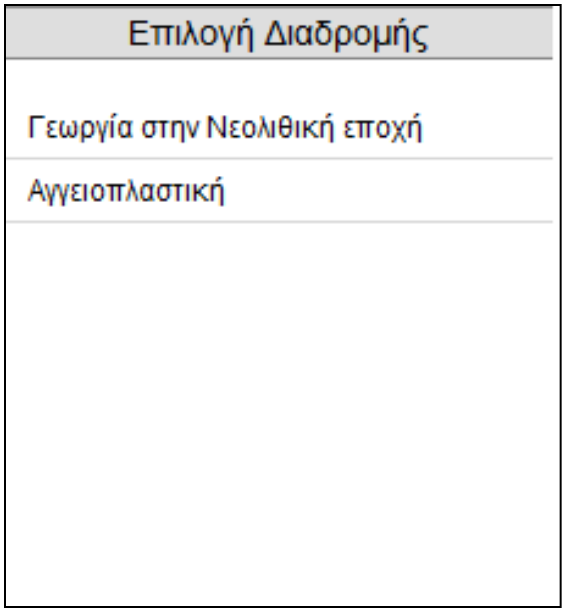
Mobile Tour – Free Tour

- Language and audience type selection
- Showcase information retrieval
- Short description voice messages
- Videos from excavation sites
- Photo gallery (related exhibits)
- Additional information on particular artifacts through photo gallery

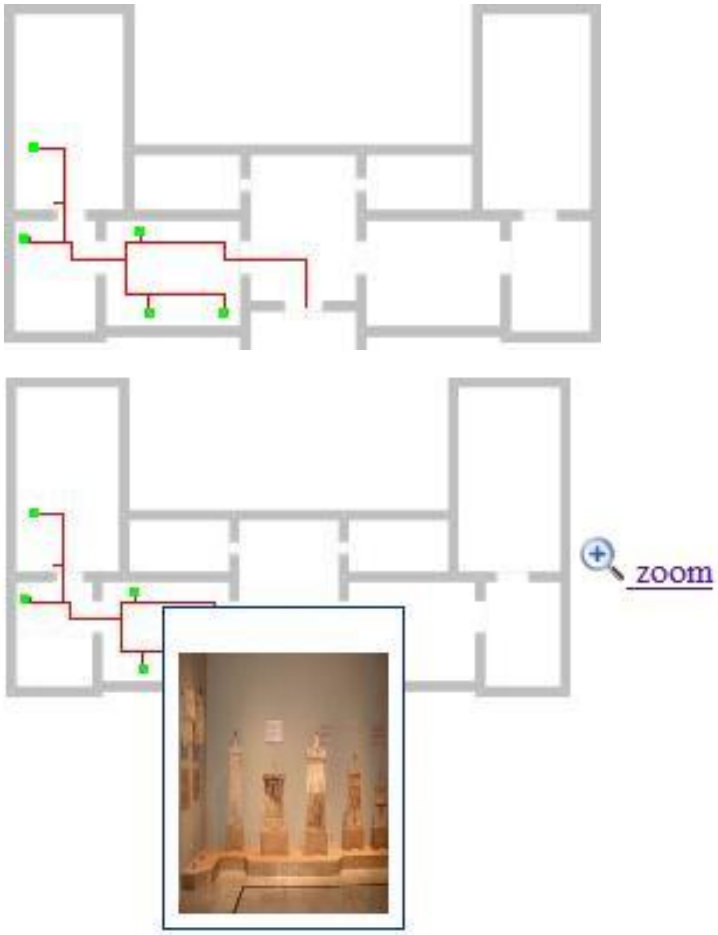
Mobile Tour – Guided Tours

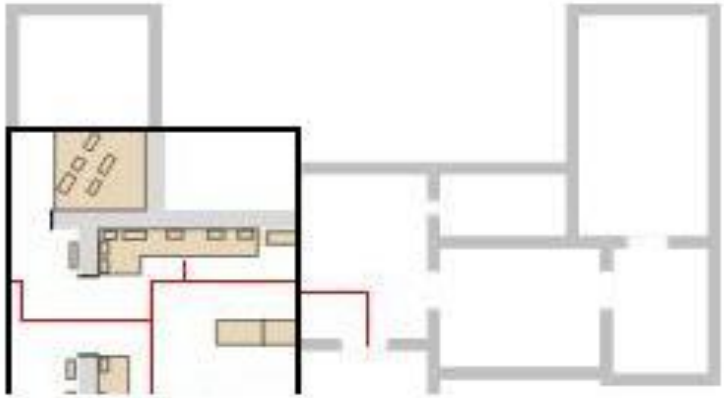
- Predefined tours
- Dynamic generated Tours

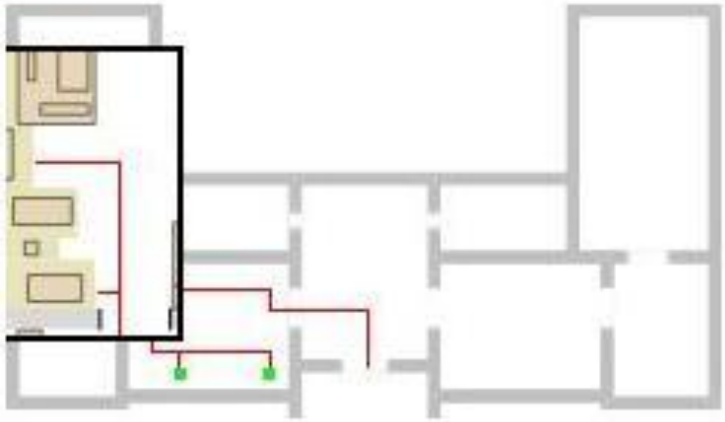




Mobile Tour – Guided Tours







Mobile Tour – Guided Tours

- Preview Route
  - Tooltips
  - Zoom Utility
- Route Recalculation

Implementation Issues

- Detailed Museum map
- Position of Showcases
- Position of RFID Tags

Museum's Map