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➤ **The challenges as  
supervisor of students'  
software projects in  
competitions**

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## ➤ The goal

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- Sharing a good experience involving students work in some competitions.
- Introducing the latest winning projects and the opinion of students participating in them.
- Discussing the problems, challenges and responsibilities as supervisor.

# ➤ **Computer Engineering Department**

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- Computer engineering department is one of three departments of Faculty of Information Technology , Polytechnic University of Tirana
- Department provides three study programs:
  - Bachelor in Computer Engineering
  - Master of science in Computer Engineering
  - Professional master in Computer engineering

**Each of them has a final diploma thesis.**

# ➤ The participation in the competitions

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- “Imagine Cup” by Microsoft –national competition

Two first places, one second place and one third place.

- “Government data in your hands”- national competition to make government data transparent.

One second place and one third place.

## ➤ E-HEALTH - Imagine Cup Albania

- In Albania, it lacks any means to make available clinical data for patient that need immediate attention.
- A young boy died due to an allergy from the medicine the doctors gave him, because his clinical data were not available to the doctors.
- The death rates from missing information of the patient and the lack of accessibility just keeps rising.
- *Although not new to the world, Albania was and still is in real need of such innovations.*

# ➤ About the application

## Technologies

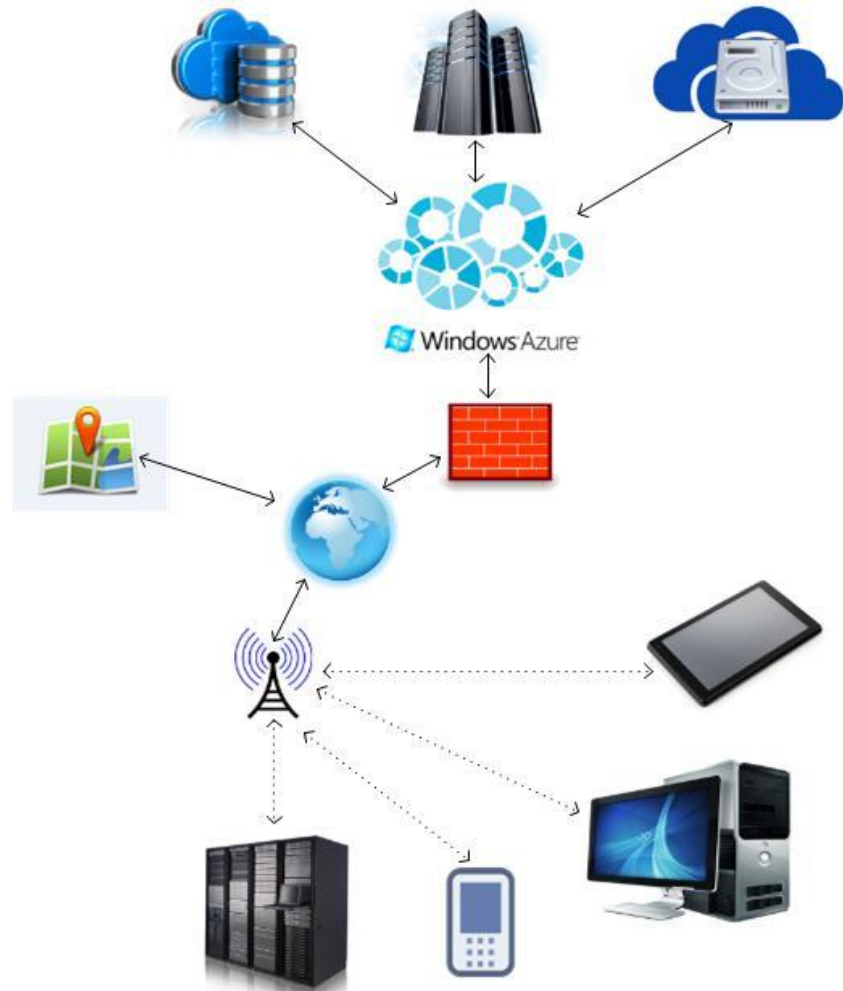
- Microsoft Azure Services, SQL & Storage
- Microsoft Visual Studio 2012
- Microsoft Blend 5
- SMS & Mail Service Notification
- Metro Style Design, touch optimized interface for Mobile & Desktop

## Concepts

- Centralized information system
- High availability infrastructure/platform
- Real-time sync/notification
- Scalable
- SOA

# Communication Scheme

Cloud-powered  
Real-time synchronization



# ➤ Eng2AlbSL- Imagine Cup Albania

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- Albania, as every other country, has an unique sign language which, for people with disabilities in hearing and speaking, is considered as their native language.
- On the other hand
  - English is an international language
  - Over 55% of the most visited websites have English-language homepages(*W3Techs.com*. Retrieved 24 March 2015.)
  - Eng2AlbSL: English to Albanian Sign Language Learning Tool



# ➤ About the application

- **Platform, development tools and technologies**
  - Windows 8 WinRT Application Platform.
  - May be used on desktop but also on mobile devices
  - Microsoft Azure Cloud Storage
  - Visual Studio 2012
- **Concept**
  - English to Albanian Sign Language Dictionary
  - English Language Learning Method
    - Reading
    - Grammar
    - Exercises



## ➤ **TIRANABUS-** Imagine Cup Albania

Meets the citizens needs.

A good public transport system is essential for urban development.

For most residents of Tirana, public transport is the only way possible to go to work, at school, medical centers and trade centers.

Promotes business

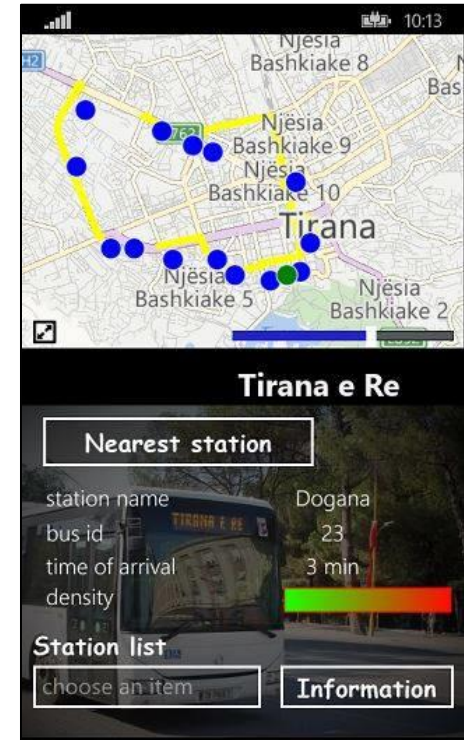
It enables businesses to control their buses and schedules.

# ➤ About the application



## ➤ Platform, development tools and technologies

- Mobile devices operating in Windows
- Microsoft Azure SQL Database
- Mobile Service
- Push Notifications/Notification Hub
- Visual Studio 2013
- Microsoft Silverlight



## ➤ Students' Feedback

- Students have had job offers from different software companies.
- ***The projects have remained at their project level are not developed further.***
- They gained additional knowledge that they had not learned in their courses.
- Very good experience of working in a team although all groups were formed by good friends.
- ***They spent extra time beside their studies to learn new technologies, time not recognized by the university.***
- 16 students in 5 winning teams- only 6 students have finished the studies.

# ➤ A proposal for UPT

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The technology transfer and innovation activity is directly related to the national policy

The national education policy should determine the innovation activities as part of obligation of the universities, as well indicator for university evaluation or ranking.

**Incubator lab:** students organized into teams under the supervision of professors, to develop innovative software or hardware/software based solutions.

## ➤ Establishing an incubator lab

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The incubator will offer the following services:

- tutoring on ideas and start-ups, and support in plan development
- technical, managerial, administrative, legal and intellectual property consultancy
- team building
- support in accessing public funding and R&D;
- networking with local companies

*Tempus project “Developing Third Mission activities in Albanian Universities” (UPT one of 14 partners)*

# ➤ Conclusion & Discussion

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- The student projects can be recognized as a diploma project, depending on the complexity scale.
- We could also propose an elective course, where the student projects can be estimated as independent projects, or as lab hours.(needs an approval process )
- The department recognizes and transfers credits for a course taken in another university but not internationally recognized certifications.
- Many discussion on the issue of internationally recognized certification and how these can be linked with the education system.( from ICT Companies)

# THANK YOU !

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QUESTION ???