



# BilMap

CTIS 165-Fundamentals of Information Systems Project

# What is BilMap?

**Introduction**  
Map Systems  
Bus Systems  
IT Components  
Cost

- BilMap is project to assist people throughout their campus life in Bilkent
- It breaks down to 2 different sub-systems.
  - Map and Location
  - Bus Systems
- Map and Location systems to guide newcomers in Bilkent to their destinations with the minimum amount of time
- Bus systems to help people in Bilkent to keep track of bus schedules, and to keep bus rotations as stable as possible without any delays.

# What do we mean by Map Systems?

- The map systems require your real time location information to provide you the shortest route to your destination.
- It makes you see the school buildings, cafeterias, libraries, hospitals praying locations and parking lots in Bilkent with their pictures attached to them.
- An extra feature with parkings lots is that you will be able to see which parking lots are empty, to spare your time looking for empty parking lots.
- This system will also work hand in hand with the bus systems.



BilMap

English

Map Satellite

Ara



Akademik Binalar



İdari Binalar



Konferans Salonları



Kütüphaneler



Derslikler



Yurtlar



Lojmanlar



Araştırma Birimleri



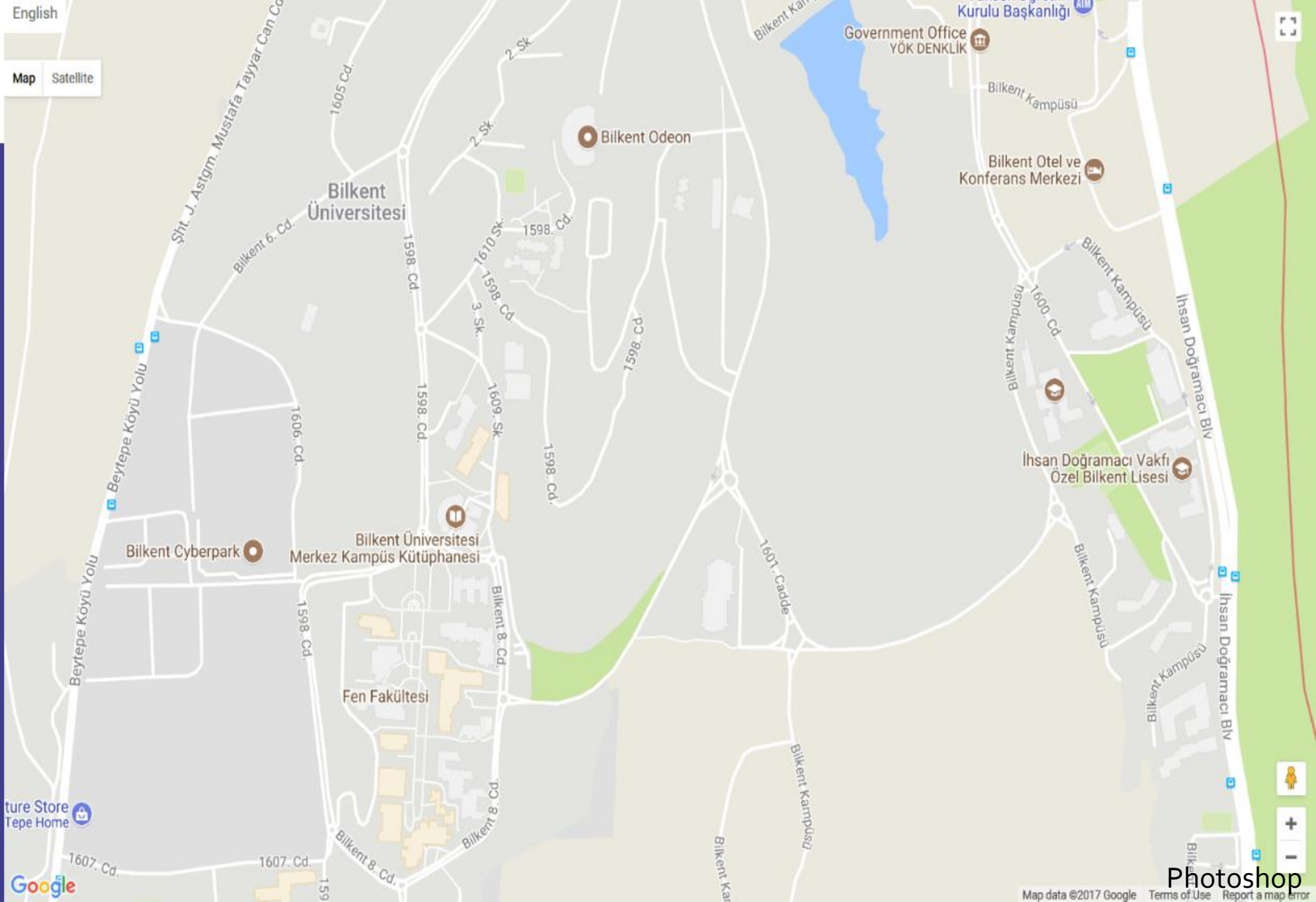
Sağlık Birimleri



Yerleşke Girişleri



Otoparklar



ture Store  
Tepe Home

Google

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Photoshop

# What do we mean by Bus Systems?

- Bus systems will provide people in Bilkent to keep track of the current location of busses, and they will be able to categorize the busses depending on their campus ring types (SMD, TMD etc.)
- The users will be able to see which busses are full through the mobile app.
- Thanks to the RFIDS located inside the bus, we will always be able to track the amount of passengers .
- In case of a bus going out of service (crashes, engine failures etc), the bus will appear as «out of service» in the map, which can be accessed from the application.



## Map

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Tepe Home 



#### 5.40 Semt Servisleri



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# Hardware

Introduction  
Map Systems  
Bus Systems  
**IT Components**  
Cost

- RFID Readers
- Transmitters
- A small portable computer to send the data (like raspberry pi)

# Estimated Cost\*

Introduction  
Map Systems  
Bus Systems  
IT Components  
**Cost**

- Raspberry Pi with data link 50-60\$\*
- Transmitter 80-100\$
- RFID Readers 10-20\$\*

-Estimated cost per bus