

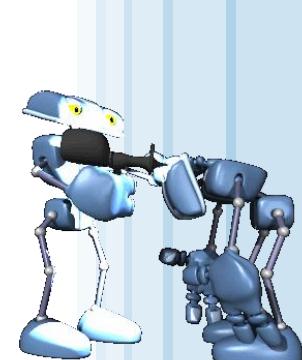
# Mobile Your Life



Supervisors:

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Elkomy

Dr. Ehab  
Rushdy



# Agenda



**Introduction**

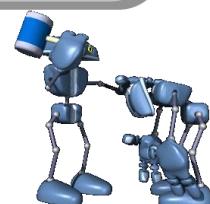
**Android Mobile Soft**

**Desktop Software.**

**Hardware circuit**

**GSM & AT-Command**

**Conclusion & Future**



# Agenda



**Introduction**

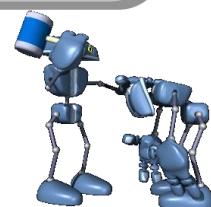
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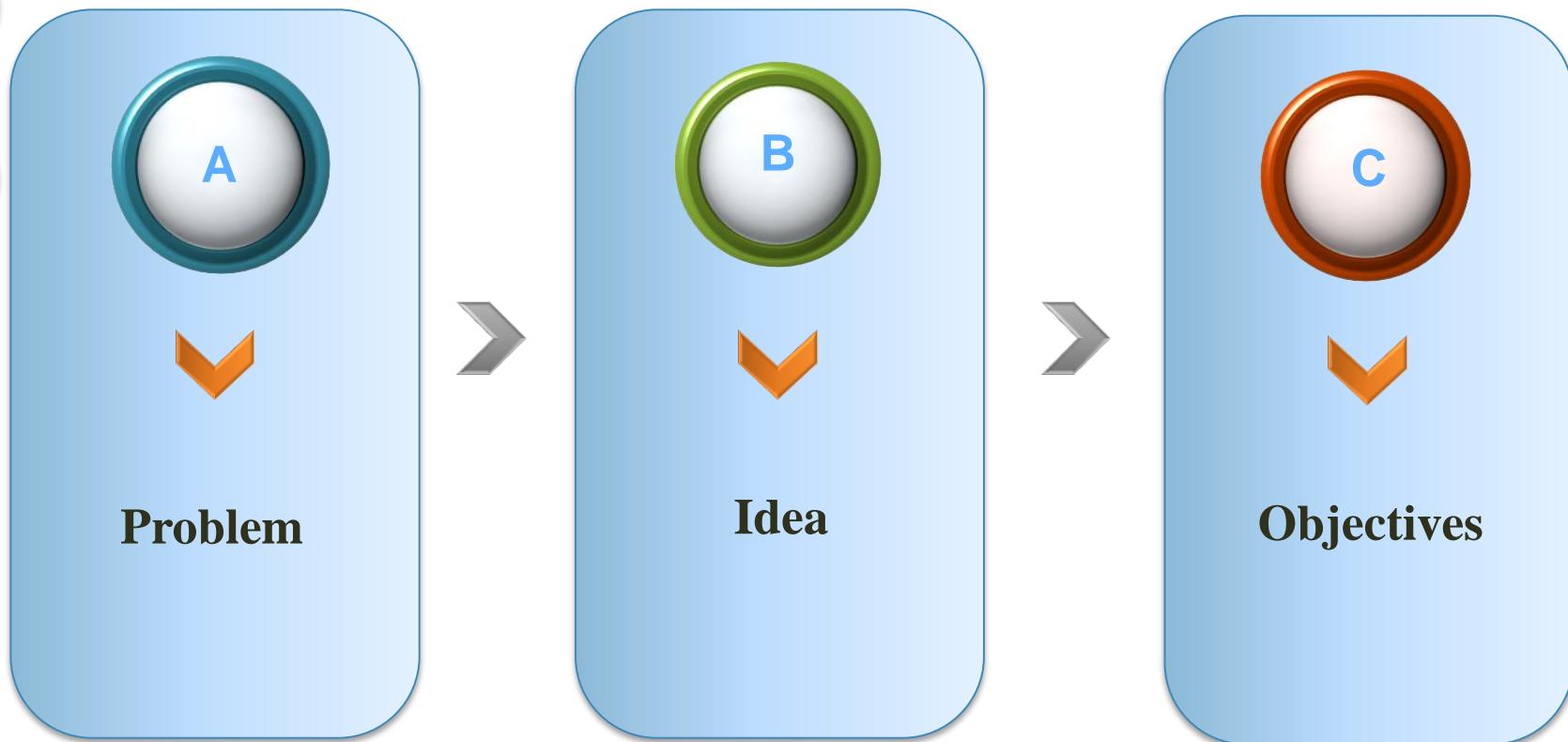
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# Introduction

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# A. Problems:

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Several  
remote  
control

- More than one  
remote.

communica  
tion  
&  
Security

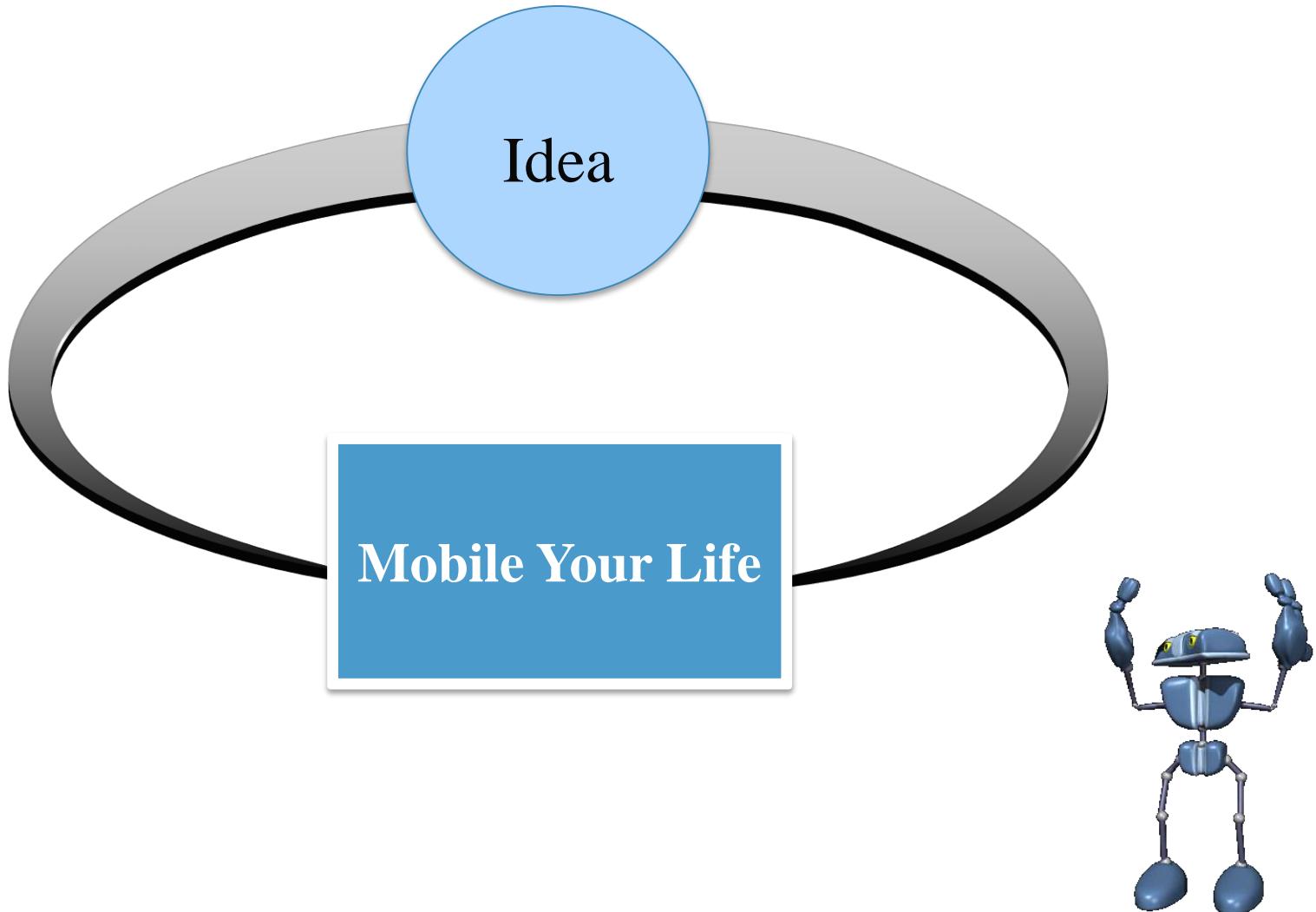
- Control all devices.

- User in emergency  
cases.

- Far communication

## B. Idea

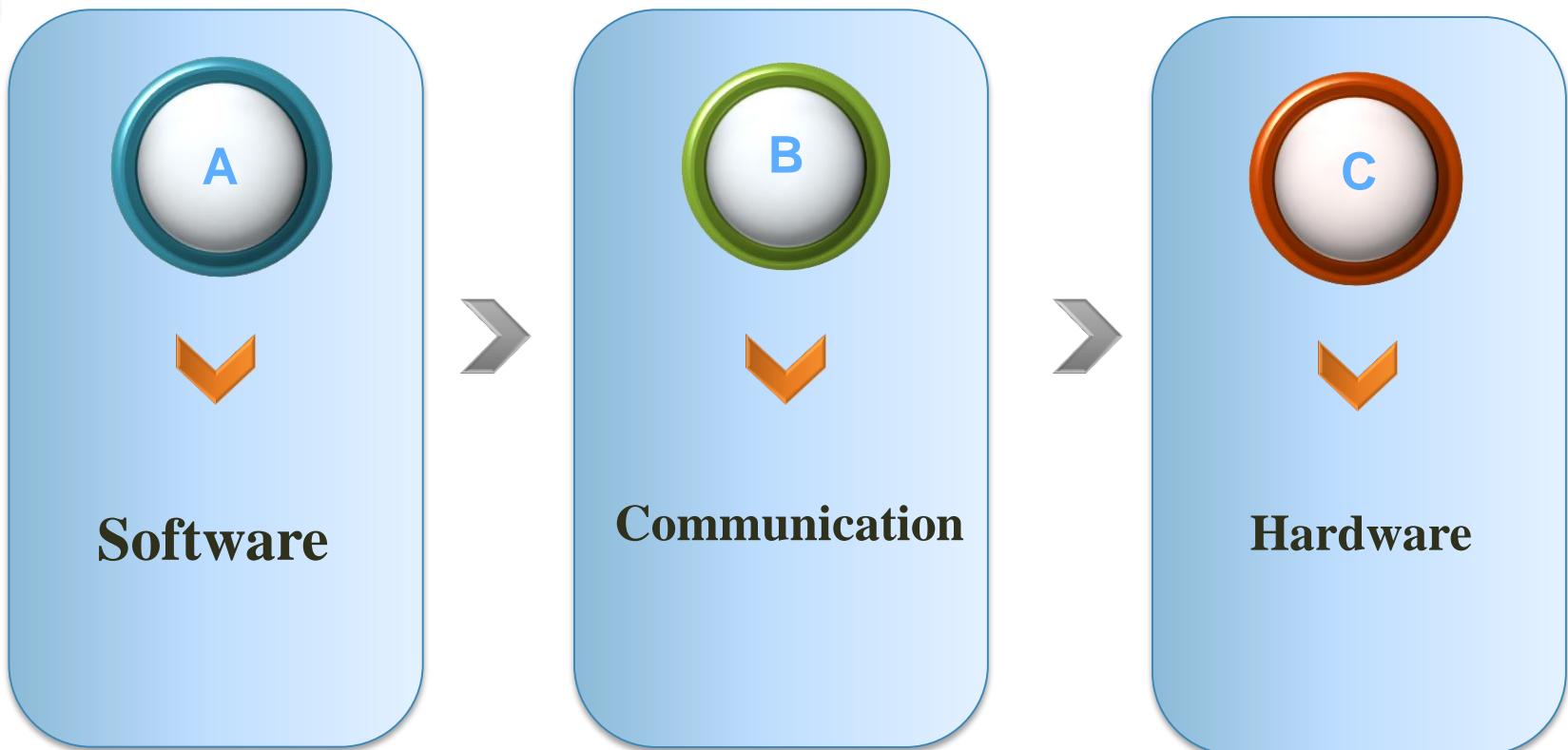
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## C. Application objectives:



# Overall Project



# Project Scope

## Project Scope

### Design the interface



### Implementation Tools



# Agenda



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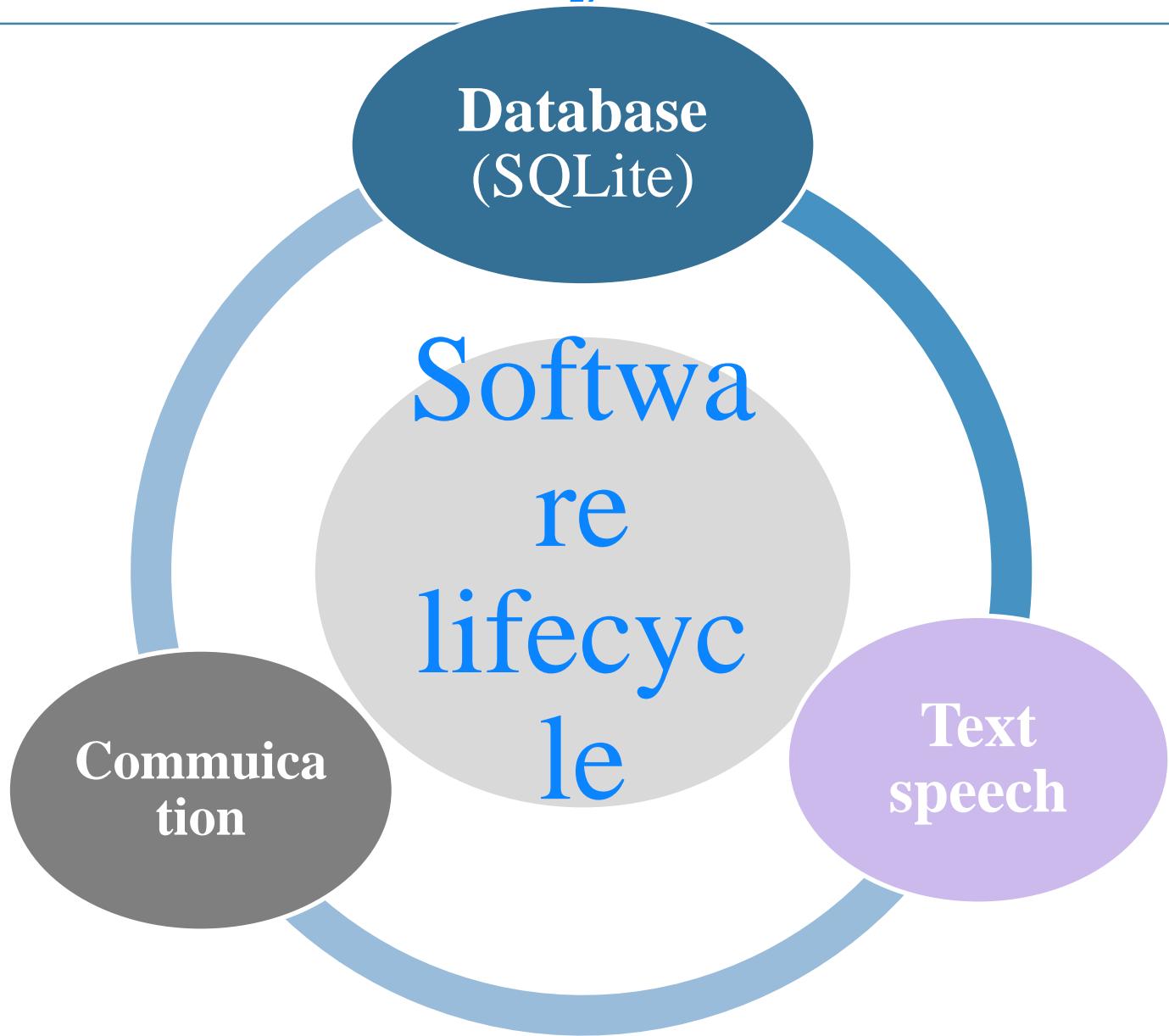
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# Software lifecycle :

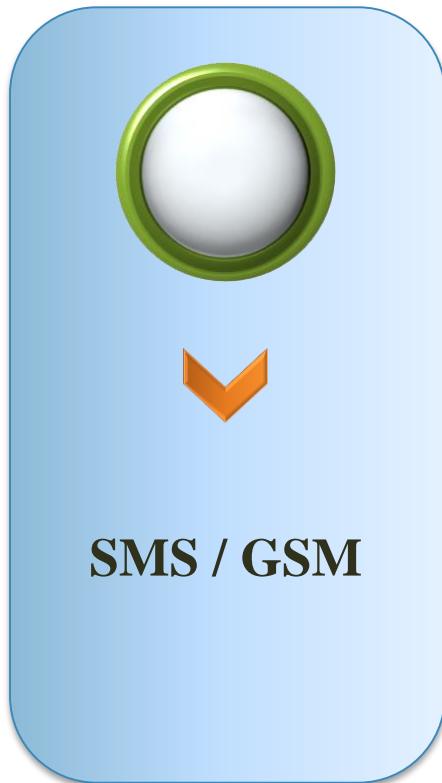


# Mobile Communication

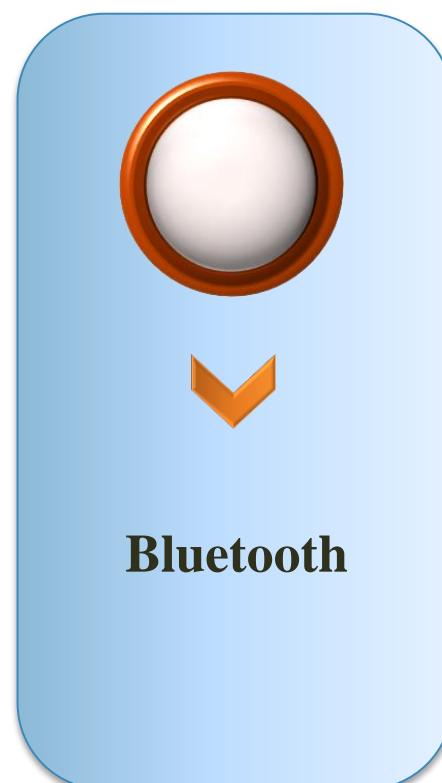
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**WIFI**



**SMS / GSM**



**Bluetooth**

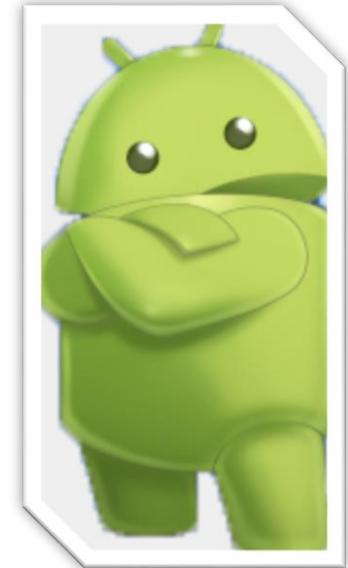
# Mobile Software:

**OS:**

Android application API  
level V2.2

**Target:**

Mobile application to connect with an electronic circuit to provide full control to all hardware devices.



# Agenda



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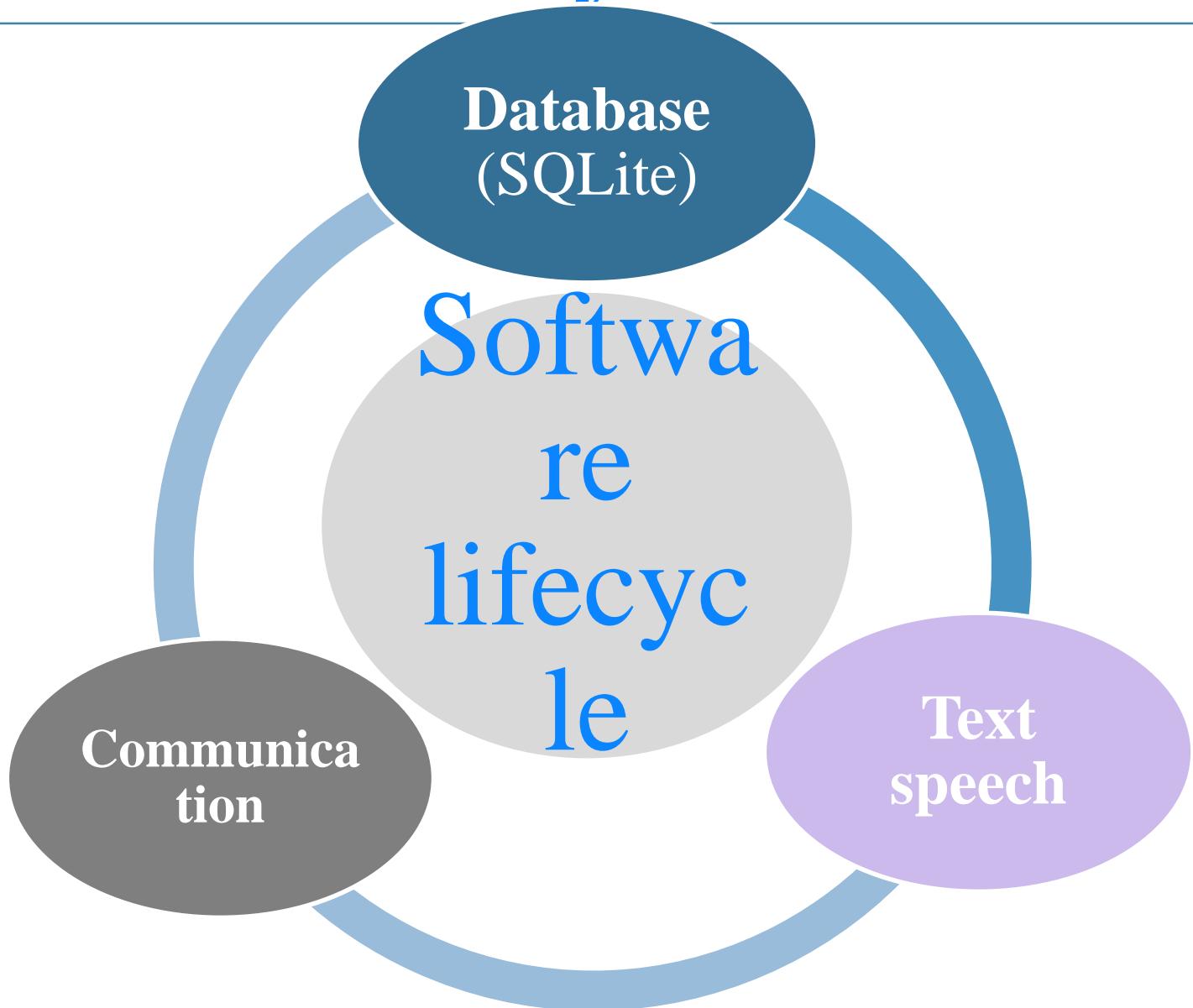
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# Software lifecycle :





# Desktop

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## Platform:

Java Platform

## Target:

Desktop application to connect with an electronic circuit and send and receive commands to it that is translated into action to provide full control.





# Desktop

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## Features:

Portable application

Provide full control

Support Text to speech



# Agenda



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# Hardware:

 Hardware is based mainly on two

1. Heart of circuit  
(microcontroller)  
we use PIC 18f4550.
2. Communication module to establish communication channel between the hardware and the desktop or mobile application.

# Microcontroller:

- Manage all activities of the hardware through a firmware written in basic proton language.



# Communication Modules

Serial to Ethernet(Wiznet)



GSM Module



# SPI protocol:

- SPI (serial peripheral interface).
- The protocol used to configure the main part in Wiznet (W5100)
- Configure IP, Port, Gateway, subnet mask, Mac address.
- Needs only 4 pins of Microcontroller.

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# GSM & AT- Commands

1. What is a GSM Modem?
2. Why GSM Modem?
3. How GSM Modem?

# How GSM Modem?

## Using AT- Commands:

### Send:

AT+CMGF=1

AT+CSCS="IRA"

//Format.(UTF,...)

AT+CMGS="0123456789" //  
Number

>Message<ctrl-z > // Message

### Receive:

AT+CMGF=1

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# Conclusion & Future.

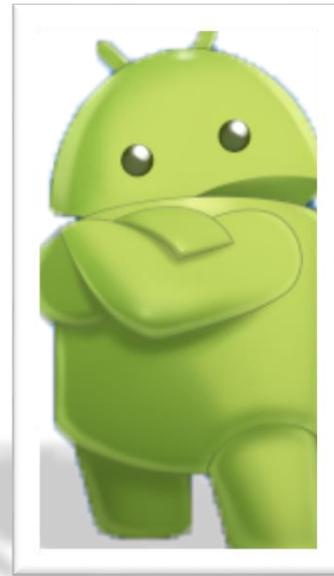
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- Full Control application to television and other application that deals with IR remote control.
- Support Bluetooth connection.
- Design hardware circuit contain Bluetooth to connect with other circuits via Bluetooth.

# Our Mobile Software:

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Try android application ?!



# Desktop Software:

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Try desktop application ?!



# Questions

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# Thank You!

