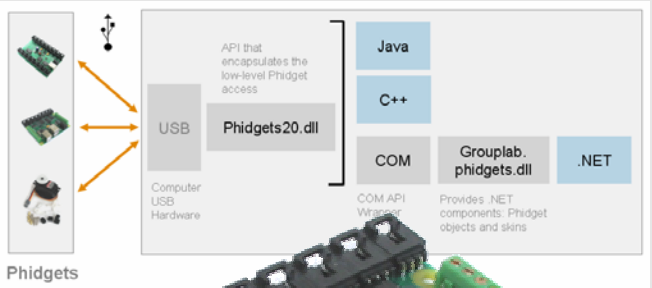
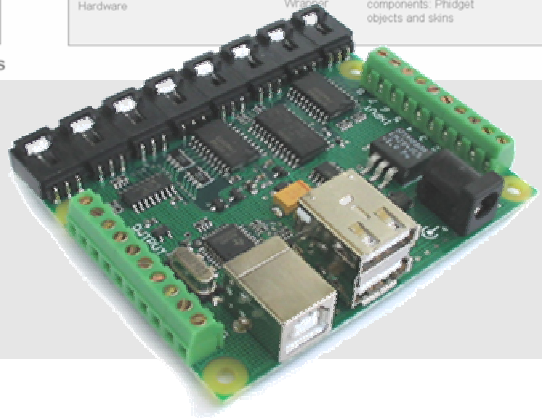
Tutorial:
Physical User Interfaces with Phidgets



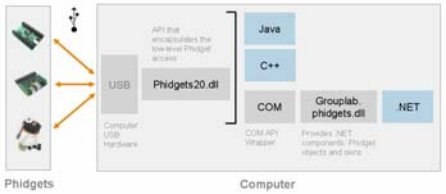


November 2005
Nicolai Marquardt
nmarquar@cpsc.ucalgary.ca

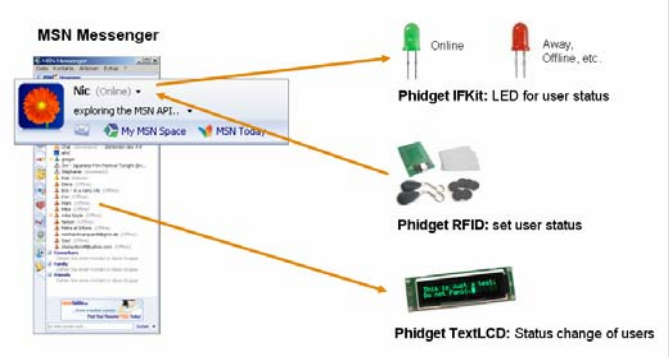
CPSC 781: Computer-Supported Cooperative Work
GroupLab, Prof. Saul Greenberg
University of Calgary

Outline

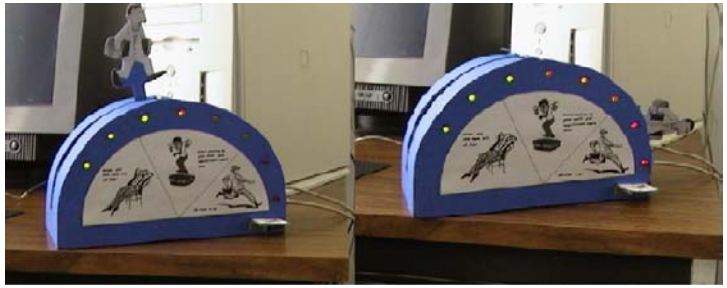
Phidget Background,
MSN API Background



The “Phidget MSN Tutorial”



Examples



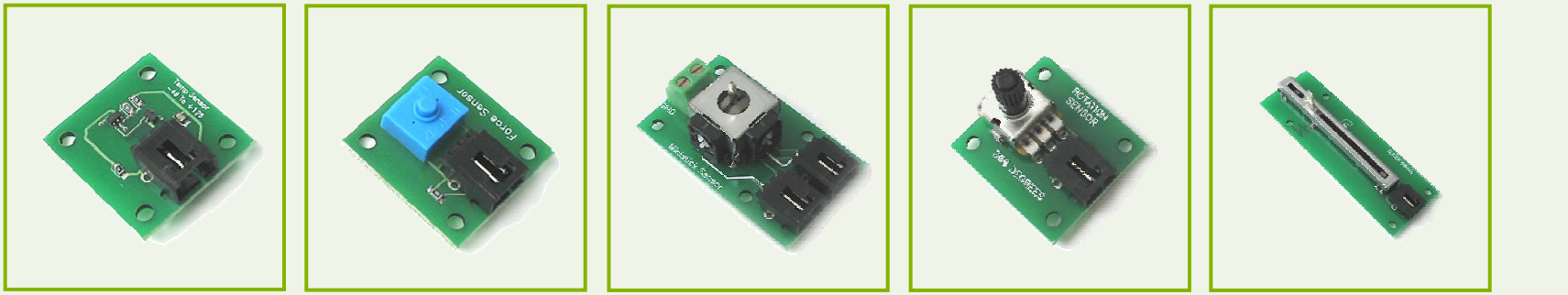
Phidgets

RFID Reader

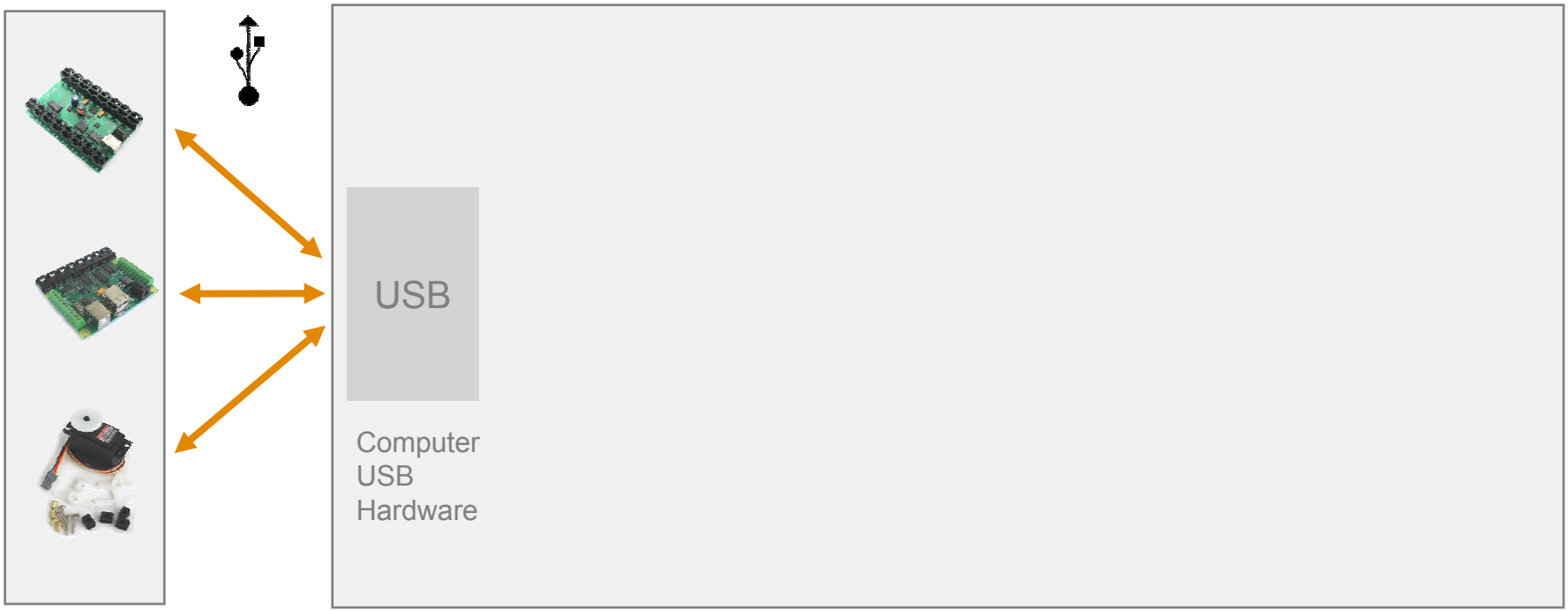
LC Display

Servo

Interface Kit



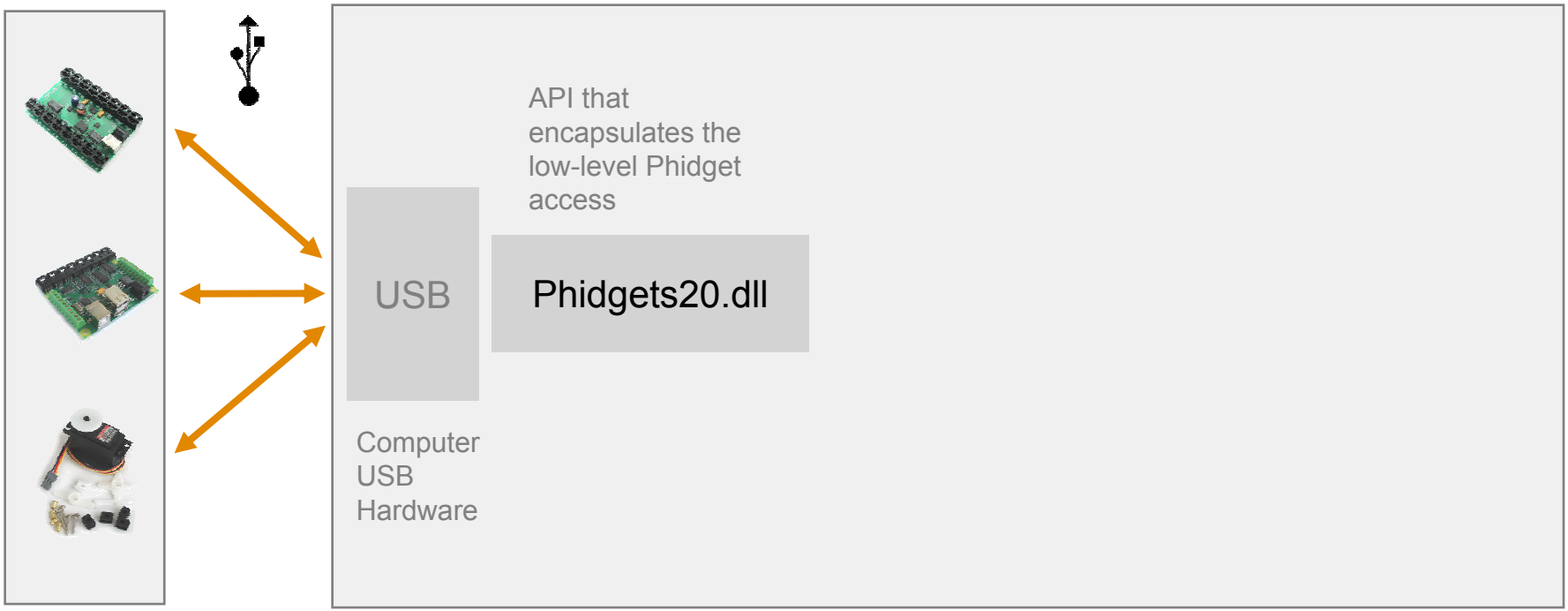
Architecture



Phidgets

Computer

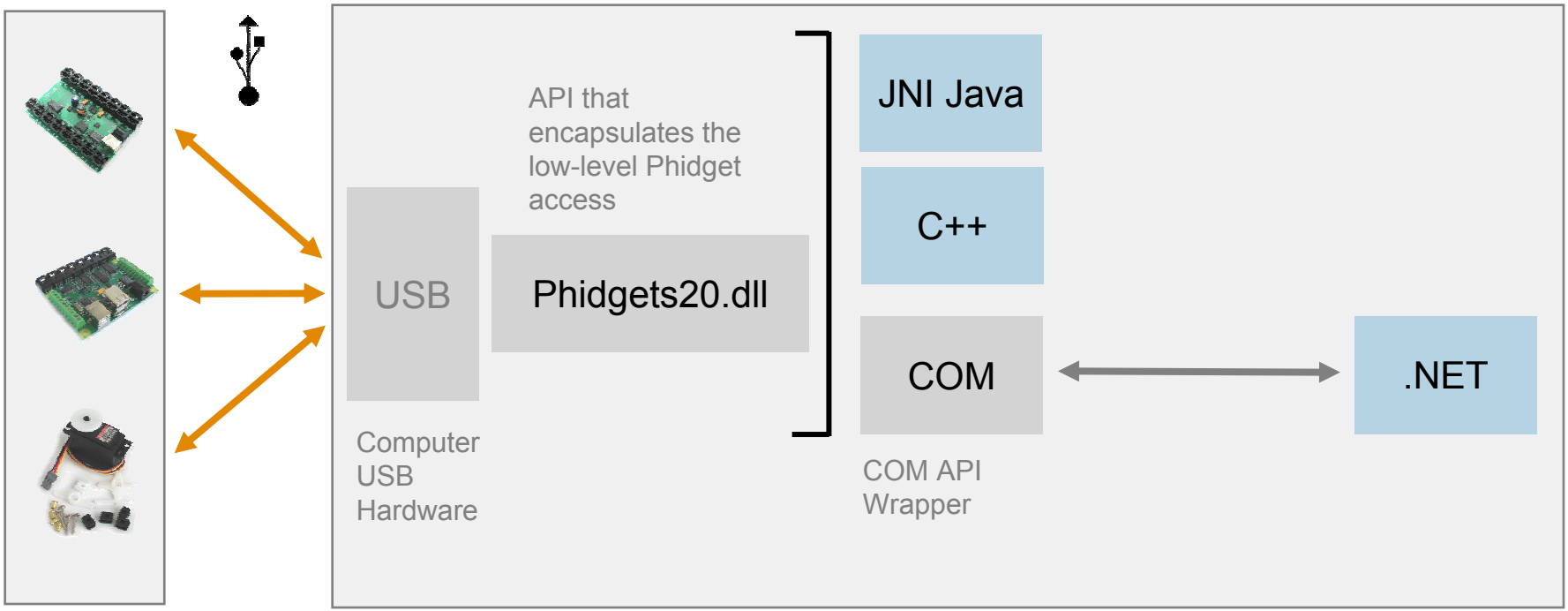
Architecture



Phidgets

Computer

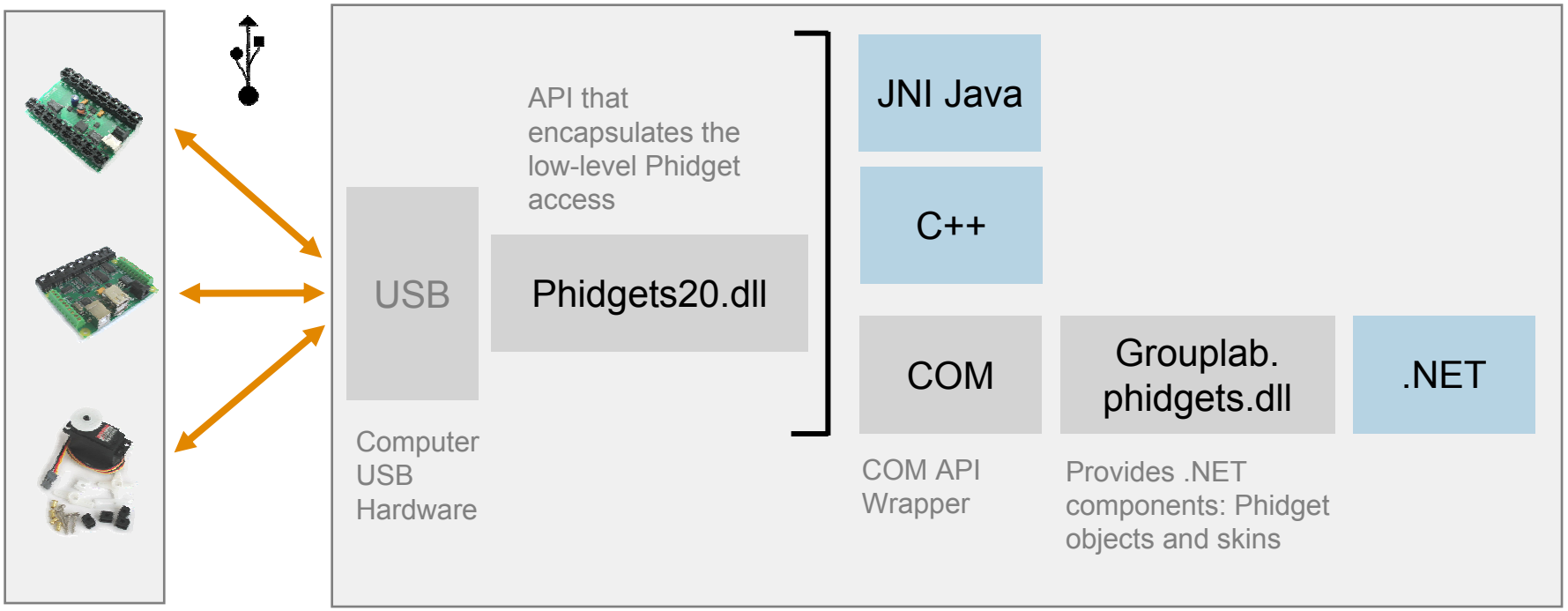
Architecture



Phidgets

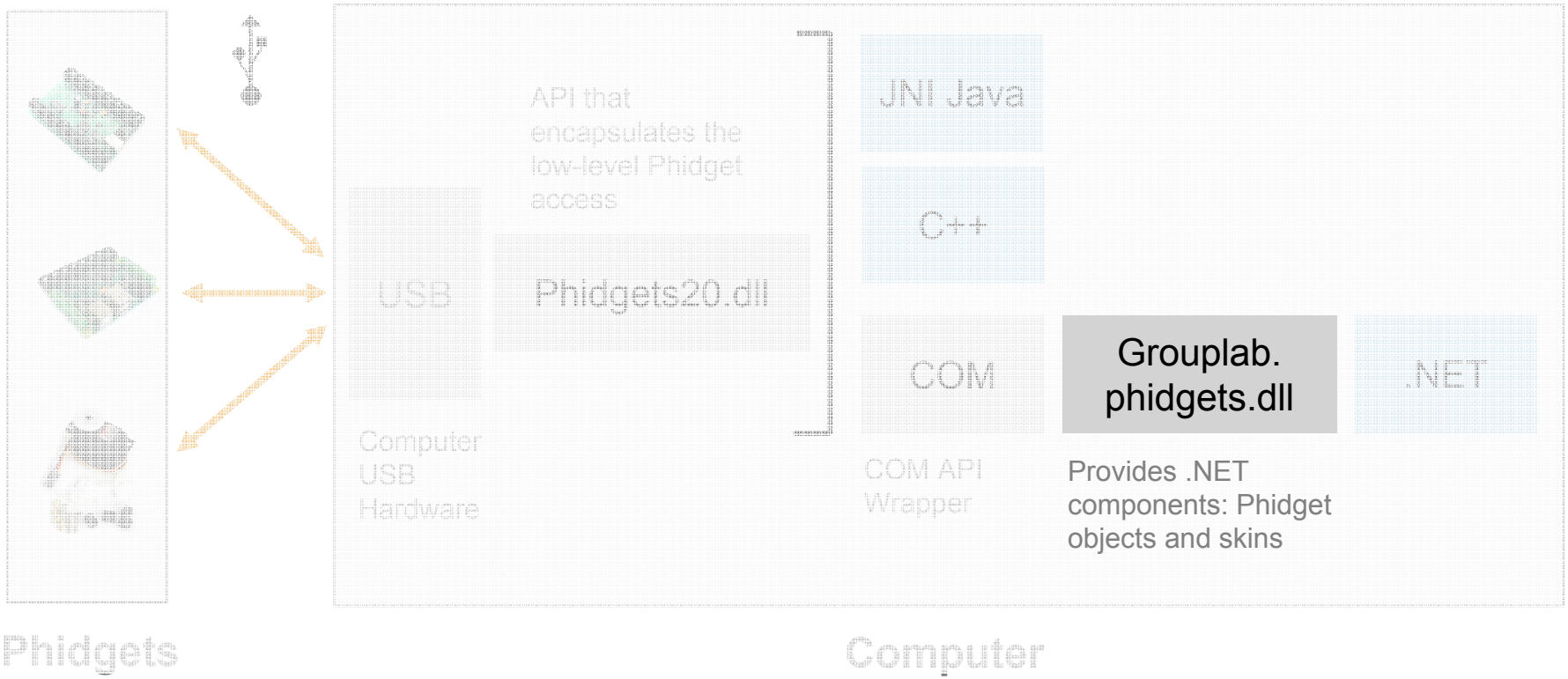
Computer

Architecture



Phidgets **Computer**

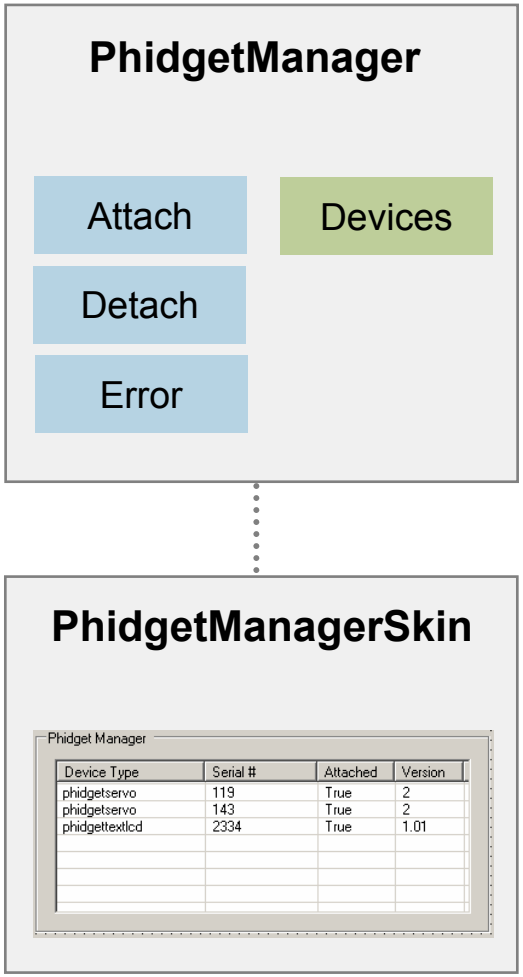
Architecture



Components and Skins

= Events

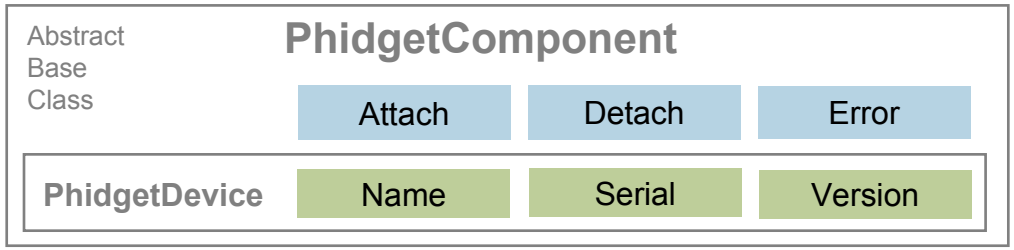
= Properties



Components and Skins

= Events

= Properties



Components and Skins

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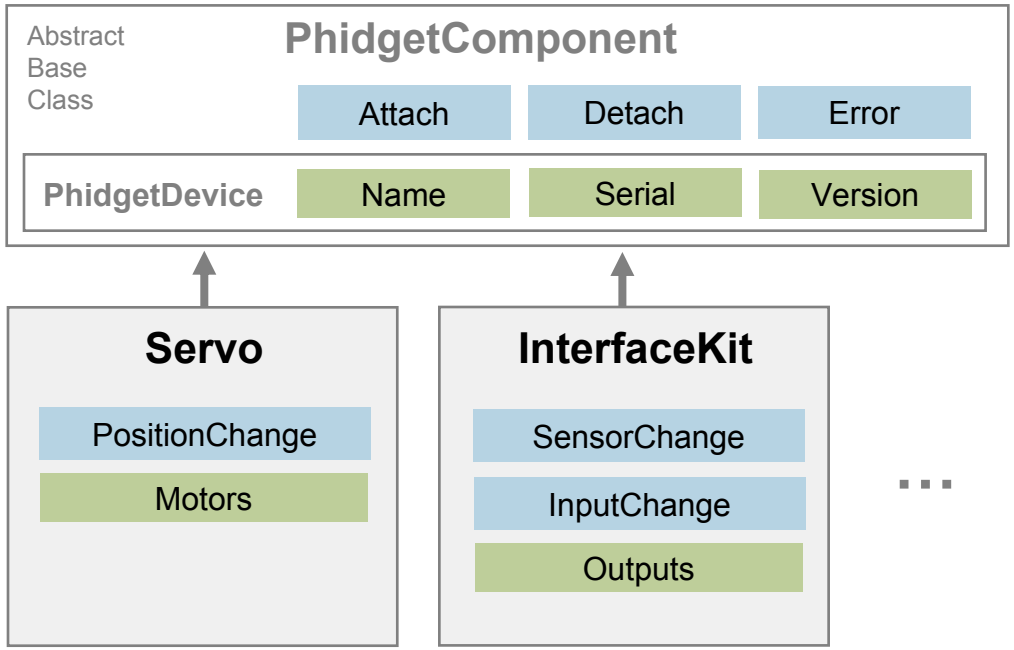

Components and Skins

= Events

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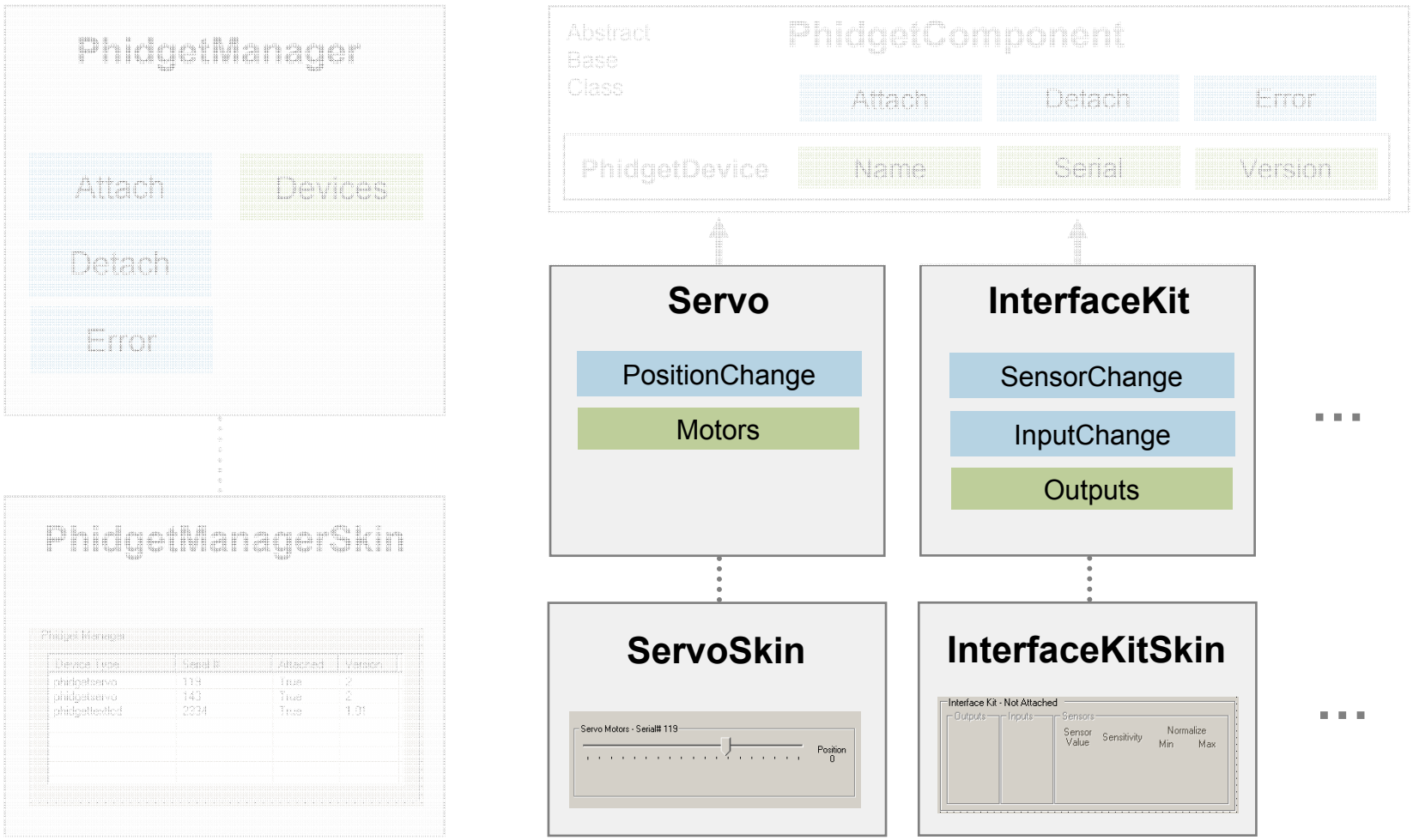
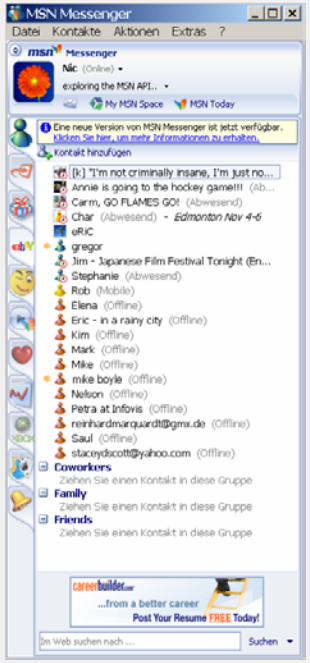


Interaction with MSN Messenger

= Events

= Properties



Messenger API Type Library

\Messenger\msmsgs.exe

Messenger Object

OnContactStatusChange

OnMyStatusChanged

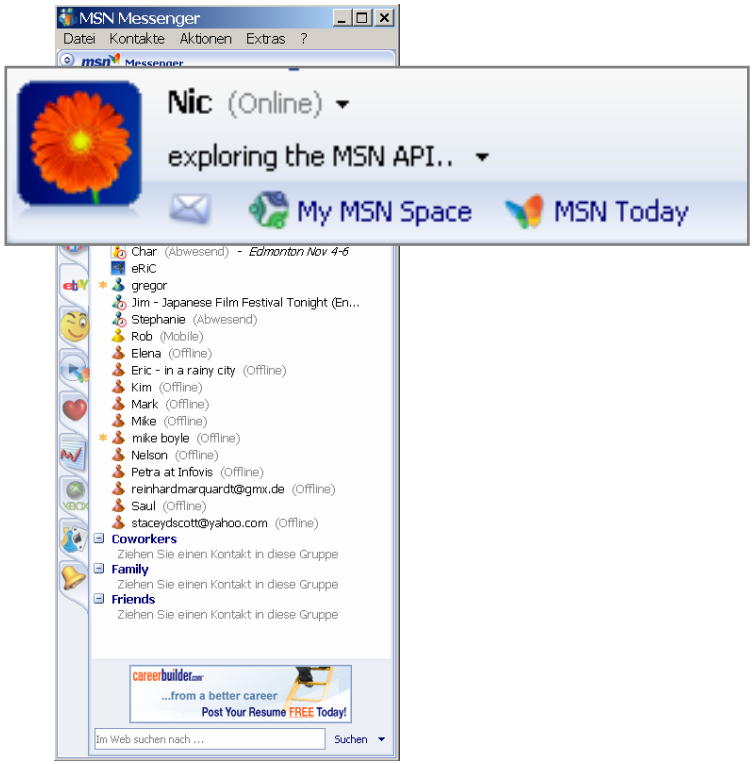
MyStatus

C# Application

The COM Interface is from the Windows Messenger (Version 4.7), but you have to use it to access the functionality of the MSN Messenger (Version 7.0 or later)

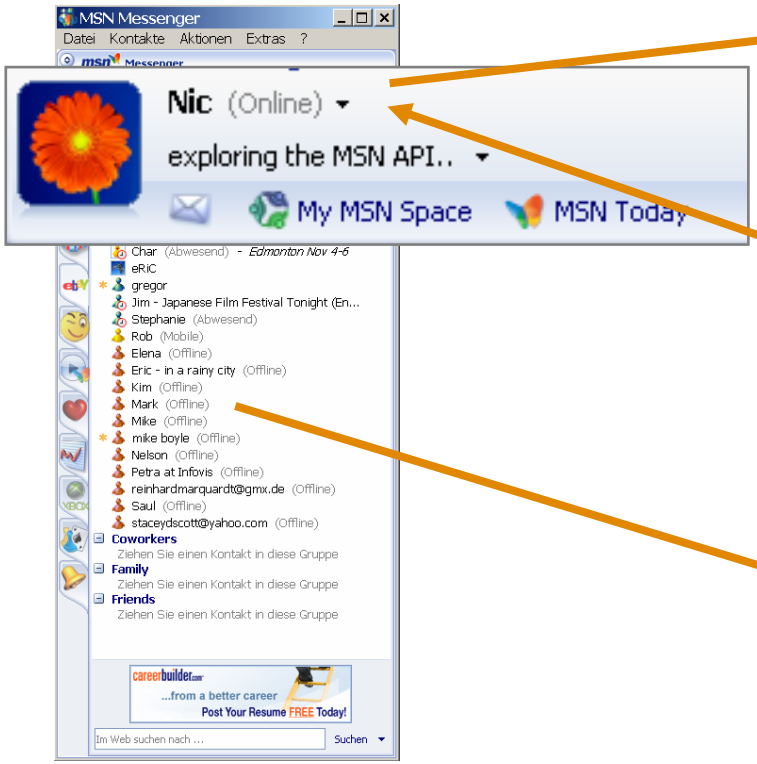
Our Application Example

MSN Messenger



Our Application Example

MSN Messenger



Online

Away,
Offline, etc.

Phidget IFKit: LED for user status

Phidget RFID: set user status

Phidget TextLCD: Status change of users

So far to the theory… let’s practice!

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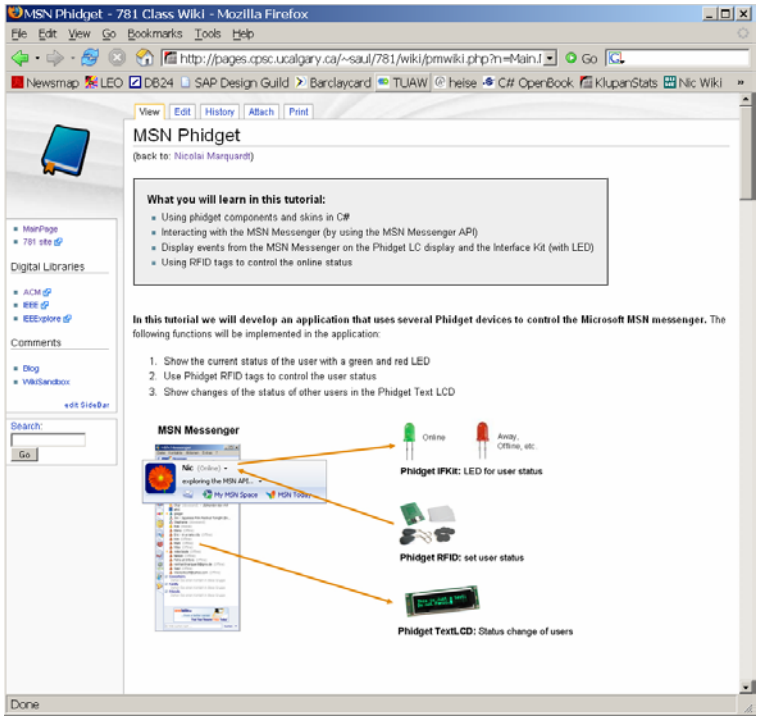
Tutorial Online

http://pages.cpsc.ucalgary.ca/~saul/781/wiki/pmwiki.php?n=Main.MSNPhidget