

Apex and Visualforce



salesforce[®]
Platform

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Create a custom mobile interface for warehouse employees to track inventory from mobile phones



Salesforce Mobile

No additional development, admin configured and controlled



Mobile HTML Application

Web development skills required, easily made for multiple devices and screens



Mobile SDK Development

Offers access to device functionality and can create the most fast performing applications



Create a **custom mobile interface** for warehouse employees to track inventory from mobile phones

Create a data driven web page that is designed for mobile devices



Mobile HTML Application

Web development skills required, easily made for multiple devices and screens



Mobile SDK Development

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Movements of the Shoulder:

1. Flexion - Pectoralis major & front fibers of the deltoides



(i)

(ii)



(iii)



2. Extension - Teres major, latissimus dorsi & back fibers of deltoides

(i)



3. Adduction
Pectoralis major
With teres major
& front & back
fibers of the
deltoides.

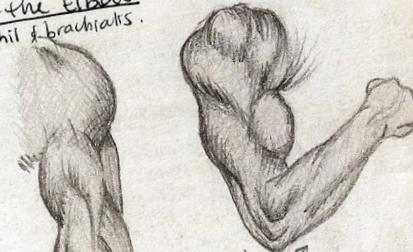


4. Abduction - The centre fibres of the deltoides.



The Movements of the Elbow

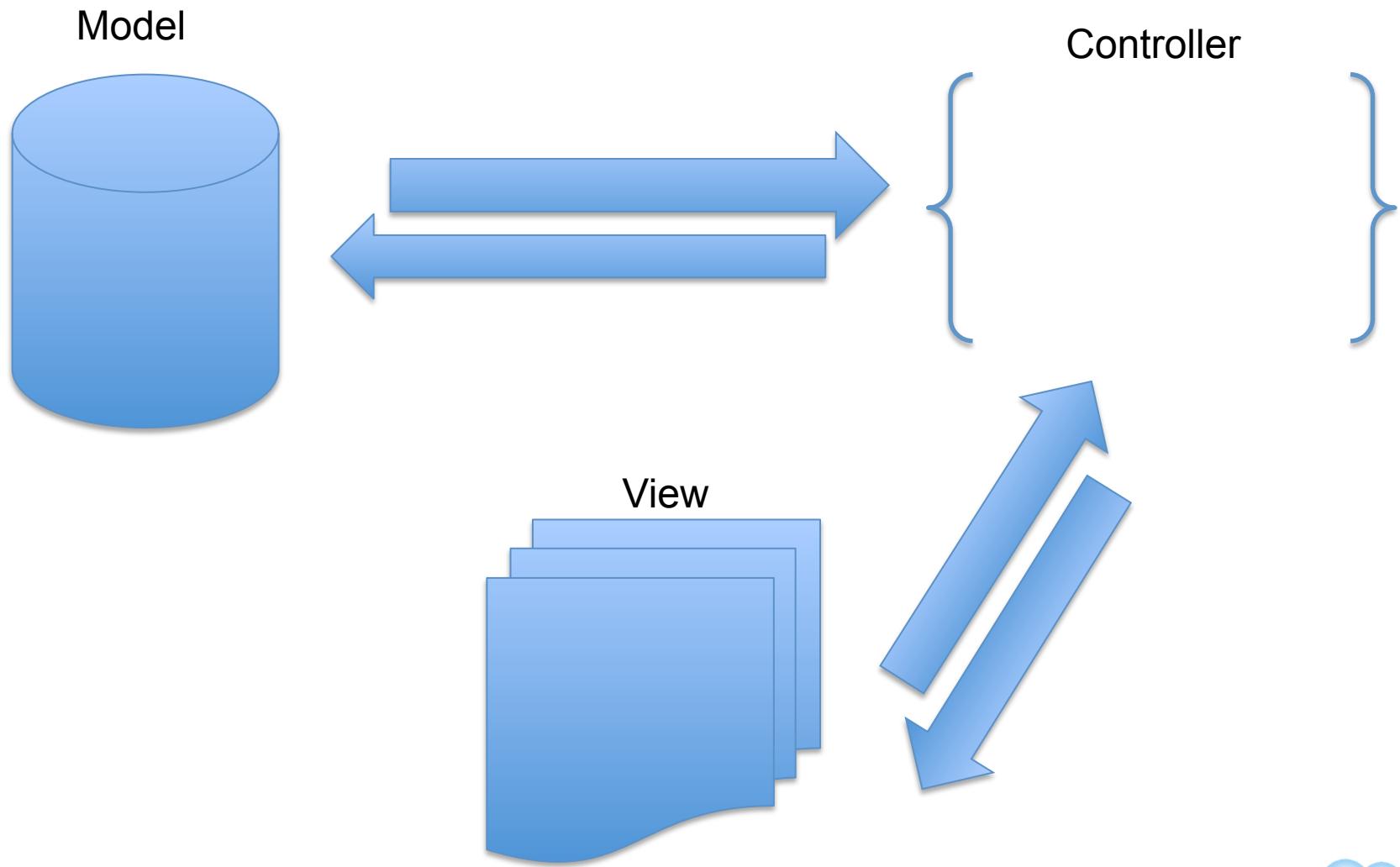
2. Flexion - Biceps brachii & brachialis.



Extension -
Triceps

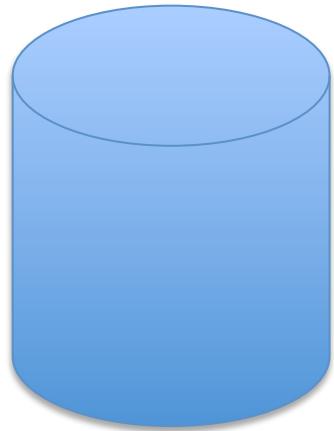


Model View Controller (MVC) Pattern



Model View Controller (MVC) Pattern

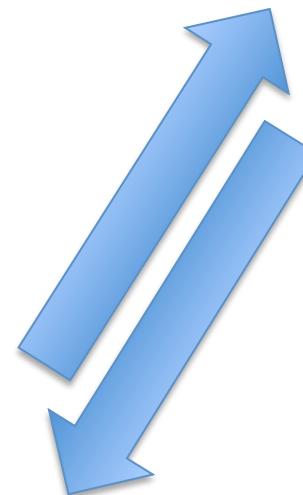
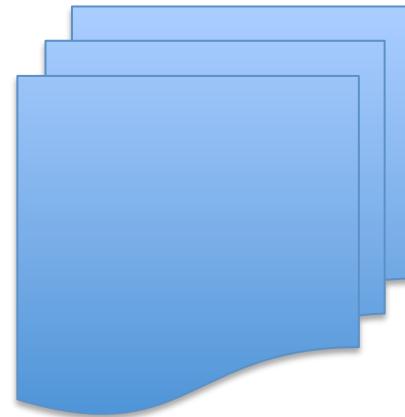
Your Data



Your Logic

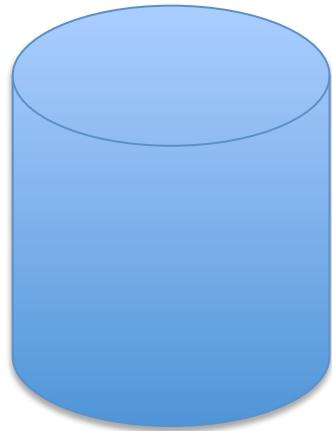


Your Interface



Model View Controller (MVC) Pattern

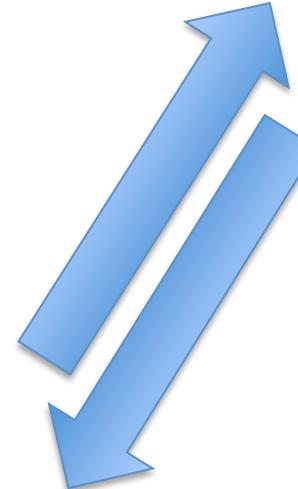
Custom Objects

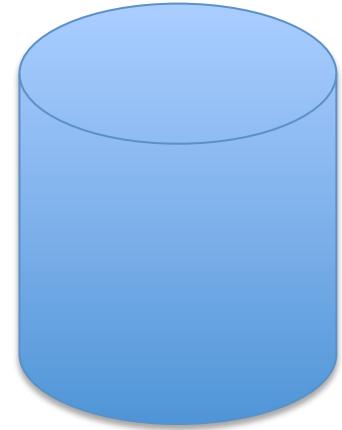


Apex



Visualforce





SOQL

Query language for accessing Force.com data

SQL-like in features and syntax

Accessing data directly via Apex

Accessing data via SOAP, REST and Bulk API

SOQL Anatomy

SELECT one or more fields

FROM an object

WHERE filter statements and, optionally, results are ordered

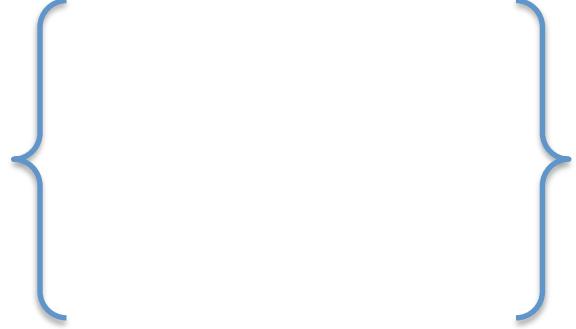
SOQL Anatomy

```
SELECT Id, Name  
FROM Contact  
WHERE LastName = 'Smith' ORDER BY CreatedDATE ASC
```

SOQL Anatomy

```
SELECT Name,  
(  
    SELECT CreatedBy.Name  
    FROM Notes  
)  
FROM Account
```

Create a custom mobile interface for warehouse employees to track inventory from mobile phones



Apex cloud-based programmatic language with direct access to Force.com data

- Java like syntax supporting interfaces, scoping and annotations
- Directly accesses and manipulates data via SOQL and DML
- Can be scheduled, run asynchronously, or set in batch mode
- Can send, receive and parse emails, HTTP callouts, SOAP, and JSON
- Can be exposed as a web service or REST endpoint

Apex Class Anatomy

Class and Interface based

```
public with sharing class myControllerExtension {
```

```
    private final Account acct;
```

Scoped Variables

```
    public Contact newContact {get; set;}
```

```
    public myControllerExtension(ApexPages.StandardController stdController) {
```

```
        this.acct = (Account)stdController.getRecord();
```

```
}
```

```
    public PageReference associateNewContact(Id cid) {
```

```
        newContact = [SELECT Id, Account from Contact WHERE Id =: cid LIMIT 1];
```

```
        newContact.Account = acct;
```

Inline SOQL

```
        update newContact;
```

Inline DML

```
}
```



Apex Class Anatomy

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public with sharing class myControllerExtension {  
  
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        newContact.Account = acct;  
        update newContact;  
    }  
}
```

What can you do with Apex?



Controllers



Custom API and
HTTP Callouts



Inbound/Outbound
Email Services



Database Triggers



Scheduled and Batched Tasks

The Developer Console

The screenshot shows the Salesforce Developer Console interface. At the top, there are navigation buttons (< >), an 'Execute' button, and a status bar indicating 'PushTopic pushTopic = new PushTopic();pushTopic.Name = 'ChatterFeed';pushTopic.Q...'. To the right of the status bar are 'Close All', 'Save All', and 'Workspace: Default' buttons. Below the status bar, tabs for 'Logs', 'Heap Dumps', and 'Repository' are visible, with 'Heap Dumps' currently selected.

In the main area, a modal window titled 'Enter Apex Code' contains the following Apex code:

```
1 PushTopic pushTopic = new PushTopic();
2 pushTopic.Name = 'ChatterFeed';
3 pushTopic.Query = 'SELECT Id, Type, Body, Title, CreatedBy.Name F
4 pushTopic.ApiVersion = 25.0;
5 pushTopic.NotifyForOperations = 'All';
6 pushTopic.NotifyForFields = 'Referenced';
7 insert pushTopic;
```

Below the code editor, a sidebar shows a list of objects: 'AccountList' (selected), 'Case', 'Contact', 'Lead', 'Opportunity', 'Product2', 'Task', and 'User'. A 'Clear' button and a checked 'Th' checkbox are also present in this sidebar.

At the bottom of the code editor, there are 'Open Log', 'Execute', and 'Execute Highlighted' buttons. The number 3 is highlighted in red in the sidebar, and the number 3 is also highlighted in red in the line numbers of the code editor.

On the far left, a vertical list of line numbers from 1 to 7 is shown. At the bottom, another line of code is partially visible: 'accounts = [SELECT ID, Name from Account];'

Problems



Dealing with Traffic

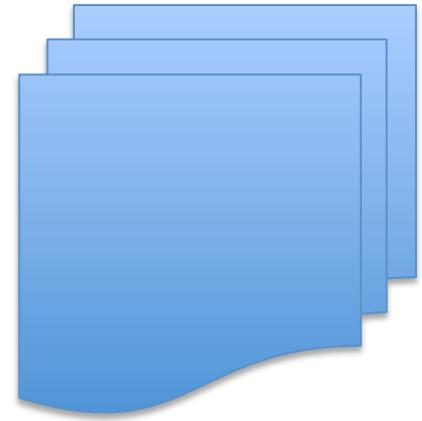




Apex cloud-based programmatic language with direct access to Force.com data

Governor limits enforces neighborly behavior
75% Unit Testing maintains production level integrity
Sandbox environments allow for safe development
Unit tests, pre-release environments and pilots aid three release cycle

Create a custom mobile interface for warehouse employees to track inventory from mobile phones



Visualforce

**A component based framework for building user interfaces
with web standards like HTML, CSS and JavaScript**

Bind logic with Controllers

Associate data directly with Components

Create custom Components and Templates

Utilize popular web technologies like jQuery and Flash

Binding Logic

Inherit CRUD Operations



Extended functionality



```
<apex:page standardController="Merchandise__c" extensions="checkUser,logVisit" >
```



Standard or Custom Object

Binding Logic

Extended functionality



```
<apex:page controller="InventoryController" extensions="checkUser,logVisit" >
```



Completely Custom Logic

Component Anatomy

apex, chatter, social or c prefix



Bind data directly on the page



```
<apex:inputField value="{Contact.FirstName}" >
```



Attributes specify further
functionality

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Featured Listing



Nice big house for a big family - \$1300001
> 4 bedrooms
> 4 bathrooms
> 2989 square feet 1 Master Bedroom Suite, 1 Tub, 2 or More Stall Showers, Area Carpeting, Attic, Attic Fan, Built-In Vacuum, Cable TV Available, Ceiling Fan(s), Double Pane Windows, Formal Entry, Gas Water Heater, Ground Floor Bedroom, High Ceilings, Laundry Area Inside, Loft, Pantry, Recreation Room, Separate Dining Room, Tub in Master Bedroom, Tub with Jets, Wall to Wall Carpeting.

Our Agents

> Ryan Marples
> Linda Chan

Contact Us

Big Cloud Realty is located at 450 Main Street in Santa Clara, California. You can reach us Monday

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Mobile Visualforce Tutorial

Mobile SDK Demo



salesforce®



THANK YOU