

# Panda Framework

~Java Web Application Development Framework~

# Table of Contents

1	About Panda Framework.....	3
1.1	Outline.....	3
1.2	Features.....	3
1.3	Panda Framework Applying Effect .....	5
1.4	System Architecture .....	6
1.5	Modules .....	7
2	Code Generator.....	8
2.1	About the code generator .....	8
2.2	The effect of code generator .....	9
2.3	Generated features by code generator .....	10
2.4	Generated web page transition diagram .....	11
2.5	Screenshot of generated source .....	12

# 1 About Panda Framework

## 1.1 Outline

Panda Framework is a Java development framework that helps you quickly develop a web application. Panda Framework is an elegant, extensible framework for creating enterprise-ready Java Web applications. The framework is designed to streamline the full development cycle, from designing to building, to deploying, to maintaining applications over time. Comparing to popular Java application frameworks such as Spring/Struts2/Hibernate, Panda Framework is small and complete, easy to use, and easy to develop.

## 1.2 Features

### 1. Automatic generation of the source code

The Panda Framework Code Generator can automatically generate the source of Action / Dao / Bean / View. The cost of development can be significantly reduced.

### 2. Writing SQL is not needed

Use the API provided by Panda Framework, a programmer does not need to write SQL statements, can easily execute query / insert/ update / delete function based on a database table. It is easy to extend the Panda Framework's base class to achieve some special purpose. So, it can improve the quality of source

code and reduce the bugs.

### 3. **HTML Page ⇒ PDF Convert Feature**

### 4. **Business Logic Development is Easy**

Using template class to develop Search/List/View/Add/Update/Delete function is very easy and fast.

### 5. **Improve productivity and source quality**

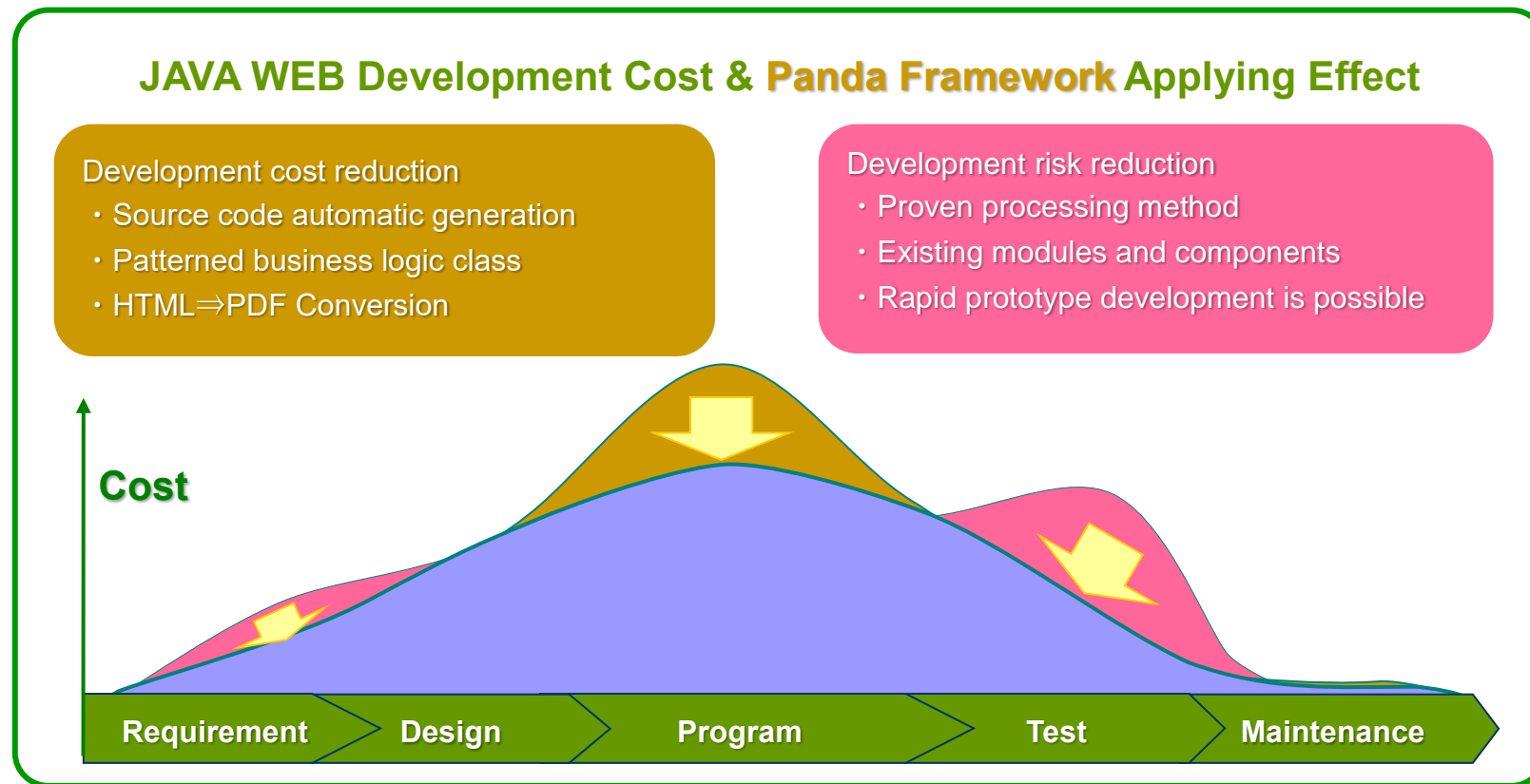
Base on the generated source, the source quality and program productivity can be significantly improved.

### 6. **Easy to use**

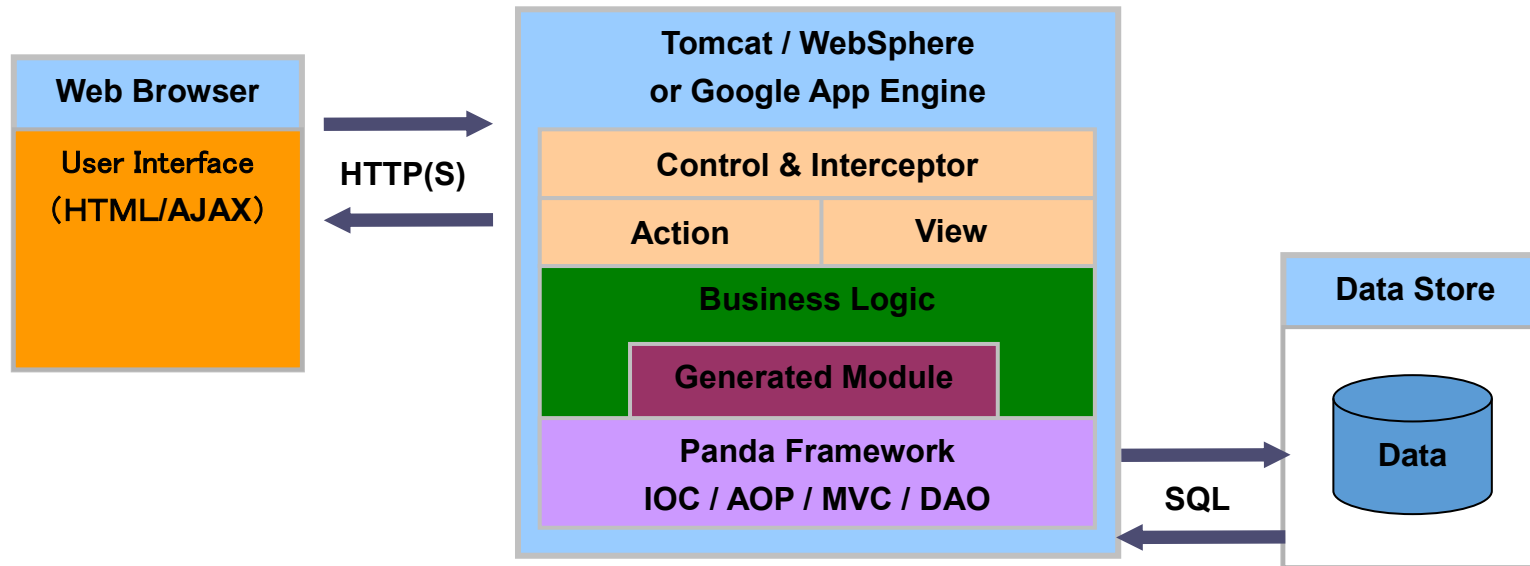
We provide a rich set of documents and samples to reduce initial cost from introduction to development.

### 1.3 Panda Framework Applying Effect

By applying Panda Framework, effective development and operation maintenance can be achieved.



## 1.4 System Architecture



## 1.5 Modules

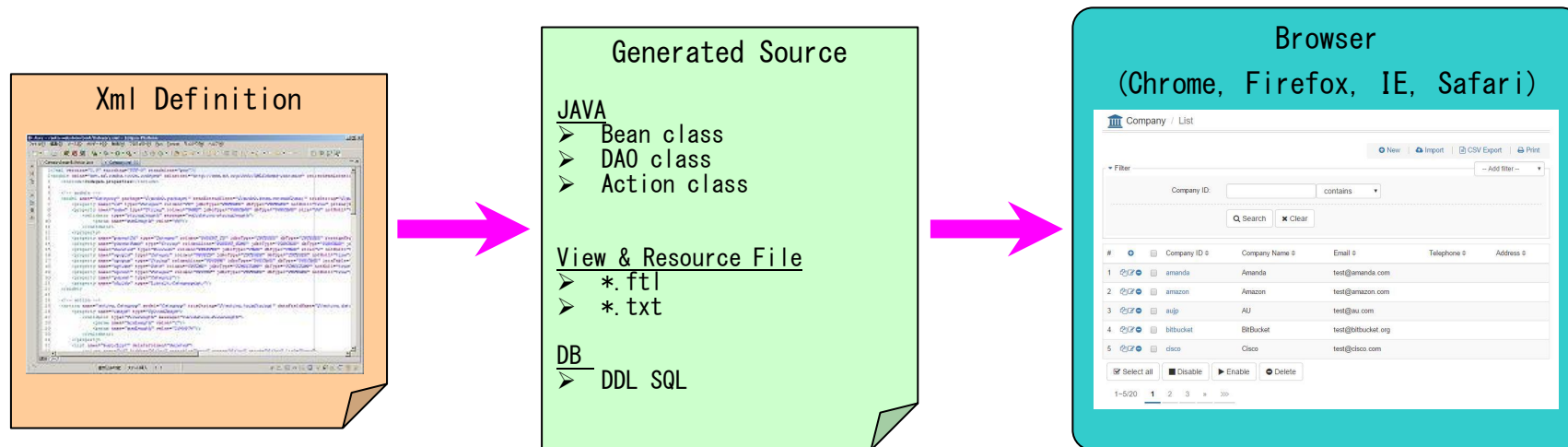
Panda Framework consists of the following modules.

Module	Description
panda-core	This is the most basic part of the Panda framework and it contains many useful classes similar to apache-commons.
panda-gear	loc/Mvc/TagLib module. Similar to Spring-MVC, Struts2, contains some commonly used taglib.
panda-glue	ASM/AOP module.
panda-html	Contains jQuery, Bootstrap, and the css/javascript required by panda-gear's taglib.
panda-tool	Source code generator. Can generate Entity/Query/Dao/Action class, Freemarker (HTML) template file.
panda-tube	Web Service API client (WordPress XMP-RPC, Google Vision API).
panda-wear	Extension Web-APP module. Contains basic template classes that implement CRUD, user authentication, and some other useful classes.

## 2 Code Generator

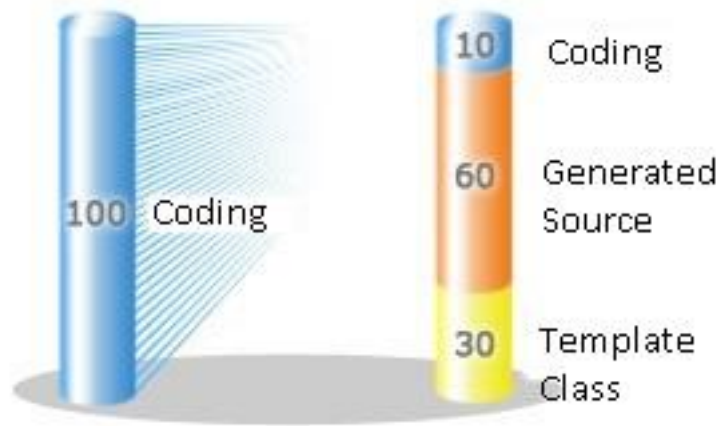
### 2.1 About the code generator

By using the Code Generator of Panda Framework, programmers do not need to write source code & SQL statements. Just define the database table structure and the user interface layout, and let Code Generator automatically generate source code to achieve the data search / list(sort, paging) & record view / insert / update / delete functions based on a database table. Greatly reduce the amount of manually coded source, improve the quality of source code and reduce the development costs.





## 2.2 The effect of code generator



Based on templated CRUD class and generated source, greatly reduce the amount of manually coded source, improve the quality of source code and reduce the development costs.

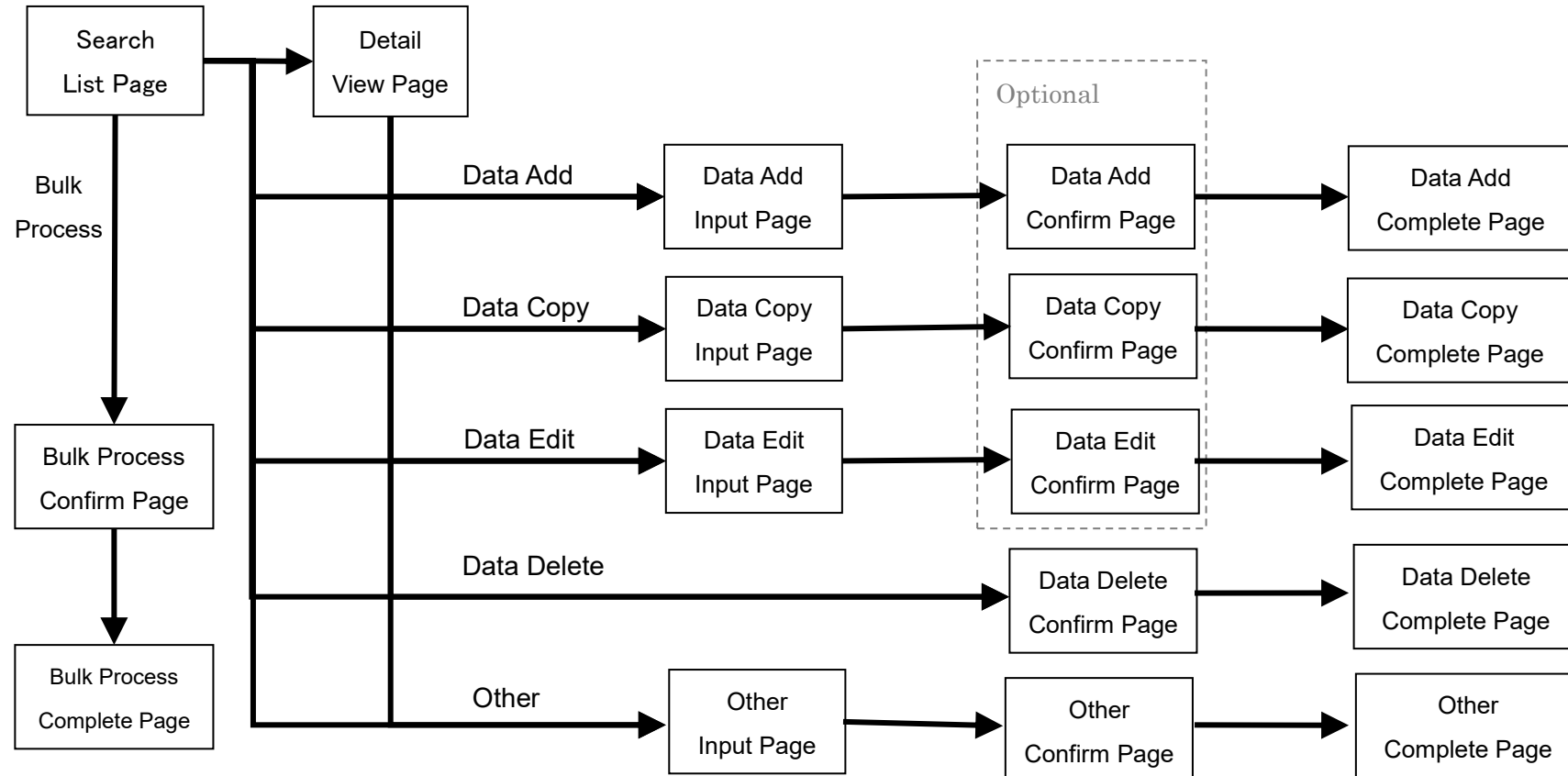
**MAX 1/10**

## 2.3 Generated features by code generator

Code generator can generate the following features. And it is easy to customize.


No.	Feature	Description
1	Search	Search/Query form.
2	List View	Search result list view.
3	List Print View	Search result list view for print.
4	Data Detail View	Data detail view page.
5	Data Detail Print View	Data detail view page for print.
6	Data Add	Data add feature.
7	Data Copy	Data duplicate feature.
8	Data Edit	Data edit feature.
9	Data Delete	Data delete feature.
10	Data Export	Export data to CSV/XLS file.
11	Data Import	Import data from CSV/XLS file.
12	Bulk Data Process	Process multiple data.

## 2.4 Generated web page transition diagram



## 2.5 Screenshot of generated source


















### 1. List/Search Page

 Company / List

[+ New](#) | [Import](#) | [CSV Export](#) | [Print](#)

▼ Filter — Add filter — ▼

Company ID:  contains ▼

#			Company ID ↕	Company Name ↕	Email ↕	Telephone ↕	Address ↕
1			 amanda	Amanda	test@amanda.com		
2			 amazon	Amazon	test@amazon.com		
3			 aujp	AU	test@au.com		
4			 bitbucket	BitBucket	test@bitbucket.org		
5			 cisco	Cisco	test@cisco.com		

☒ Select all ☐ Disable

1~5/20 **1** 2 3 » >>>

## 2. Detail View Page



Company / View

 Print

 List

Company ID: amazon

Company Name: Amazon

Email: test@amazon.com


Cookie Age:

Allowed IP: 192.168.1.1

Telephone: 012345678

Address: 410 Terry Ave. North Seattle, WA

Memo: test

 Edit


 Delete

 Copy

 New

 List

### 3. Data Add Page

 Company / Add

The item marked with \* is mandatory.

List

*Company ID:	<input type="text"/>
*Company Name:	<input type="text"/>
*Email:	<input type="text"/>
Cookie Age:	<input type="text"/>
Allowed IP:	<input type="text"/>
Telephone:	<input type="text"/>
Address:	<input type="text"/>
Memo:	<input type="text"/>

Confirm

List

## 4. Data Add Confirm Page

 Company / Add / Confirm

 List

 Are you sure to add this data?

×

Company ID: android

Company Name: Android

Email: test@android.com


Cookie Age:

Allowed IP:

Telephone: 012345678


Address: Android 1143, New York




Memo:



 Submit

 Back






## 5. Data Add Complete Page

 Company / Add / Complete

 Print |  New |  List


 The data is successfully added. 

Company ID:	android
Company Name:	Android
Email:	test@android.com
Cookie Age:	
Allowed IP:	
Telephone:	012345678
Address:	Android 1143, New York
Memo:	

 Edit |  Delete |  Copy |  New |  List





## 6. Edit Page

 Company / Edit

The item marked with \* is mandatory.

List

*Company ID:	<input type="text" value="amazon"/>
*Company Name:	<input type="text" value="Amazon"/>
*Email:	<input type="text" value="test@amazon.com"/>
Cookie Age:	<input type="text"/>
Allowed IP:	<input type="text" value="192.168.1.1"/>
Telephone:	<input type="text" value="012345678"/>
Address:	<input type="text" value="410 Terry Ave. North Seattle, WA"/>
Memo:	<input type="text" value="test"/>

 Confirm  List

## 7. Edit Confirm Page

 Company / Edit / Confirm

 List

 Are you sure to update this data?

×

Company ID: amazon

Company Name: Amazon

Email: test@amazon.com


Cookie Age:


Allowed IP: 192.168.1.1

Telephone: 012345678


Address: 410 Terry Ave. North Seattle, WA

Memo: test



 Submit

 Back

## 8. Edit Complete Page

 Company / Edit / Complete

[Print](#) | [New](#) | [List](#)

 The data is successfully updated. 

Company ID:	amazon
Company Name:	Amazon
Email:	test@amazon.com
Cookie Age:	
Allowed IP:	192.168.1.1
Telephone:	012345678
Address:	410 Terry Ave. North Seattle, WA
Memo:	test

[Edit](#) [Delete](#) [Copy](#) [New](#) [List](#)

## 9. Delete Confirm Page

 Company / Delete / Confirm

 Are you sure to delete this data?



Company ID: android

Company Name: Android

Email: test@android.com

Cookie Age:

Allowed IP:

Telephone: 012345678

Address: Android 1143, New York

Memo:

 Delete

 List

## 10. Delete Complete Page

 Company / Delete / Complete

 List

 The data is successfully deleted. 

Company ID: android

Company Name: Android

Email: test@android.com

Cookie Age:

Allowed IP:

Telephone: 012345678

Address: Android 1143, New York

Memo:

 List

## 11. Bulk Delete Confirm Page

 Company / Delete / Confirm

 List

 Are you sure to delete these 2 items?

#	<input checked="" type="checkbox"/>	Company ID	Company Name	Email	Telephone	Address
1	<input checked="" type="checkbox"/>	aujp	AU	test@au.com		
2	<input checked="" type="checkbox"/>	amanda	Amanda	test@amanda.com		

 Delete

 Back

## 12. Bulk Delete Complete Page



Company / Delete / Complete

 List



2 items have been successfully deleted.



#	Company ID	Company Name	Email	Telephone	Address
1	aujp	AU	test@au.com		
2	amanda	Amanda	test@amanda.com		

 List