CingleVue Coding Challenge- Student Data management System

Application Configuration and Deployment Guild lines:

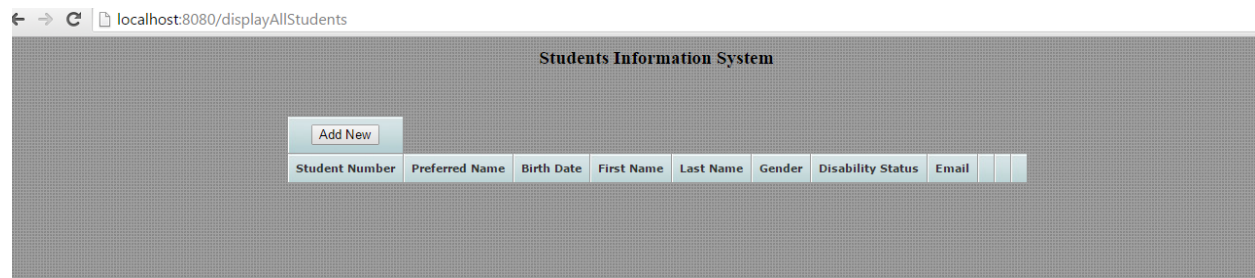Application can be deploy as War file in any Java supporting Web Application server

URL: http://ServerIP:port/displayAllStudents

Example: http://localhost:8080/displayAllStudents
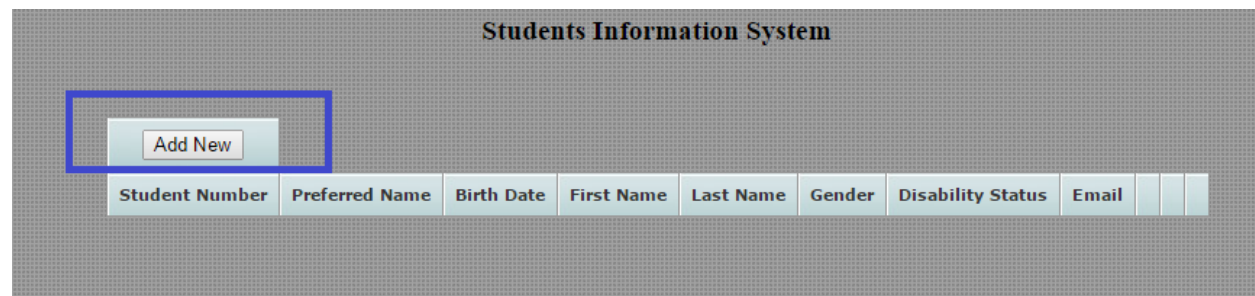
(successfully Tested on Tomcat 7)

XML Data file location can be change in **dataAccess.properties** file (if path is not specified default location is ApplicationServer directory/bin/ student_data.xml)

Location : WEB-INF\classes\dataAccess.properties

Initially there will be no entries in the Data Storage

Click on Add New Button to add new student entry

Add New Student							
Student Number	**Preferred Name**	**Birth Date**	**First Name**	**Last Name**	**Gender**	**Disability Status**	**Email**
					Select ▾	Select ▾	

save Cancle

When click on Edit button, relevant recode will be change to editable mood. After changing the values click on save button to save data.
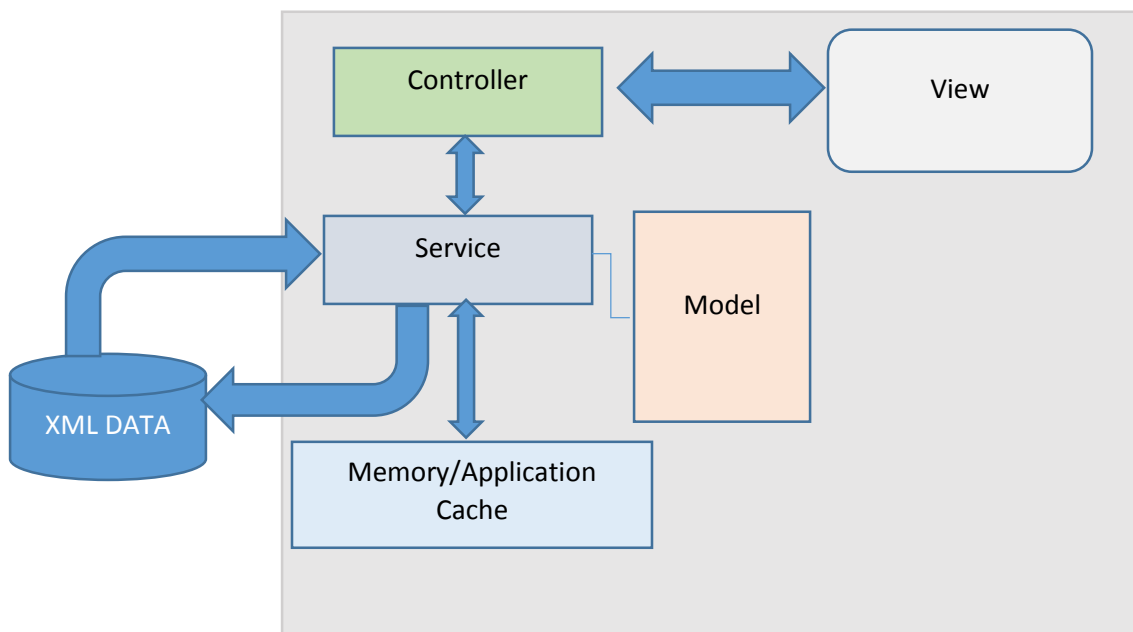
Clicking on Delete button will be deleted the recode permanently from Data storage

localhost:8080/displayAllStudents

Students Information System

Add New

Student Number	Preferred Name	Birth Date	First Name	Last Name	Gender	Disability Status	Email			
14	Christopher	Tue Jul 17 00:00:00	Alborough	Bocasan	Male ▾	False ▾	alborough.bocasan@	Edit	save	Delete!
13	Imasha	Mon Apr 13 00:00:0(	Imasha	Dilukshi	Female ▾	False ▾	abc@athc.com	Edit	save	Delete!
12	Gayan	Mon Dec 16 00:00:0	Gayan	Pathirana	Male ▾	False ▾	email2pathirana@gr	Edit	save	Delete!
123	Aoife	Mon May 18 00:00:0	Louise	Gladdish-Fitzgerald	Female ▾	False ▾	louise.gladdish-fitzg	Edit	save	Delete!

Application Architecture Diagram

High level Work flow:

1 Application is Loading XML Data to Memory (to Hash Table) in Application Stat up

2 Controller is getting data from cache via Service method to populate display result request

3 when Update/Insert/Delete operation, 1st update the cache (Hash Table) then update in to XML file

JAXB is used For marshaling and unmarshaling (JAVA to XML /XML to JAVA)

Technologies and Tools Used:

Java (J2EE) /JSP

Spring MVC

JAXB

Java Script/Jquery

Ajax

CSS

Maven

IntelijIdea (IDE)

Tomcat (Application server for hosting)