



CS3220 Web and Internet Programming

GuestBook (Servlet)

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Example: Guest Book

My Guest Book		
John says:	Hello!	Edit Delete
Jane says:	Your website looks nice.	Edit Delete
Joe says:	Nice to meet you. I'm from China.	Edit Delete
Add Comment		

Add Comment	
Your name:	<input type="text"/>
<input type="text"/>	
<input type="button" value="Add"/>	

Edit Entry	
Your name:	<input type="text" value="Jane"/>
<input type="text" value="Your website looks nice."/>	
<input type="button" value="Save"/>	

Web Application

◆ Web application = Data + Operations

◆ Data

- Guestbook entries, forum posts, products, customers, transactions, wiki pages, twitter message ...

◆ Operations

- Add/create, search, display, edit, delete ...

Guest Book Implementation

◆ Data

- `GuestBookEntry`
- `List<GuestBookEntry>`

◆ Operations

- Display
- Add
- Edit
- Delete

GuestBookEntry

- ◆ A *unique* and *immutable* identifier makes it easy to find an object (for operations like edit and delete)

GuestBook – Display

- ◆ Initialize data storage in application scope
- ◆ Pre-create some data for testing
- ◆ Generate HTML

GuestBook – Add

◆ Handling web forms usually involves two operations

- Display the form → `doGet()`
- Process the submission → `doPost()`

◆ `response.sendRedirect()` for PRG

GuestBook – Edit

- ◆ Embed id in the edit link
- ◆ Get the id parameter in submission
 - `<form>` without `action` attribute
 - Hidden form field

GuestBook – Delete

◆ Like Edit, only simpler

Lessons Learned

- ◆ Web application = Data + Operations
 - Create data classes first
 - Implement one operation at a time
 - One servlet per operation
- ◆ Web programming is still programming
 - Review Java collections (List, Set, and Map) if necessary