

## CS520 Web Programming

File Upload and Email

Chengyu Sun  
California State University, Los Angeles

## Echo Server

- ◆ Display HTTP requests
  - <http://volume1.coreservlets.com/archive/Chapter19.html>

## File Upload Request

```
POST / HTTP/1.1
Host: cs.calstatela.edu:4040
[...]
Cookie: SITESERVER=ID=289f7e73912343a2d7d1e6e44f931195
Content-Type: multipart/form-data; boundary=-----146043902153
Content-Length: 509
-----146043902153
Content-Disposition: form-data; name="file1"; filename="test.txt"
Content-Type: text/plain

this is a test file.

-----146043902153
Content-Disposition: form-data; name="file2"; filename="test2.txt.gz"
Content-Type: application/x-gzip

????????????UC
```

## Apache Commons-FileUpload

- ◆ <http://jakarta.apache.org/commons/fileupload/using.html>

```
FileItemFactory fileItemFactory = DiskFileItemFactory( 8096, "tmp" );
ServletFileUpload fileUpload = new ServletFileUpload( fileItemFactory );

if( ServletFileUpload.isMultipartContent( request ) )
{
    List items = fileUpload.parseRequest( request );
    for( Object o : items )
    {
        FileItem item = (FileItem) items;
        ...
    }
}
```

## Spring Fileupload Support

- ◆ Declare a multipartResolver bean

```
if( request instanceof MultipartHttpServletRequest )
{
    Iterator i = r.getFileNames();
    if( i.hasNext() )
    {
        MultipartFile uploadedFile = r.getFile( (String) i.next() );
        if( !uploadedFile.isEmpty() )
        {
            ...
        }
    }
}
```

## Saving the Uploaded Files

- ◆ Database
  - Option A: BINARY VARCAR or VARCHAR
  - Option B: BLOB or CLOB
- ◆ Option C: disk file

## Option A

◆ Pros??

◆ Cons??

## Option B

◆ Pros??

◆ Cons??

## Option C

◆ Pros??

◆ Cons??

## JavaMail

◆ Implementations of IMAP, POP3, and SMTP

```
Properties props = System.getProperties();
props.put("mail.smtp.host", mailhost);
Session session = Session.getInstance( props );

Message msg = new MimeMessage(session);
...
Transport.send( msg );
```

## Spring Email Support

- ◆ Declare a `mailSender` bean
- ◆ [Optionally] declare some email templates

```
SimpleMailMessage message;
message = new SimpleMailMessage( messageTemplate );
message.setTo( user.getEmail() );
message.setText( "Your password has been reset to ..." );
```

```
mailSender.send( message );
```

## Lessons Learned

- ◆ It's simple as long as you understand some basics and find the right tools.