

ZkMail Webmail Application Manual

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1 Introduction

The ZkMail Webmail Application is a Rich Internet Application that provides all the features which are sufficient to act it as a full-featured webmail client.

It is built primarily using ZK AJAX framework for web user interface. It uses JAVA Mail API as a middleware to connect to various mail stores. So it can work with almost any mail stores.

Currently it is tested with following mail servers.

- hMailServer - <http://www.hmailserver.com/>
- Gmail - <http://www.gmail.com/> (IMAPS mail store)
- Apache James (james-server-container-spring-3.0-M2) - <http://james.apache.org/>

2 Features

ZkMail Webmail Application provides following features.

- **Intuitive AJAX based Webmail GUI** – ZkMail provides smooth, responsive and customizable user interface using ZK framework.
- **AJAX based chat module** – Comprehensive chat module with group discussion support
- **Tabbed Email Browsing** – Email messages are displayed within a tabbed pane for quick navigation.
- **Mailbox Sorting & Searching** – Emails can be sorted based on the subject, received/sent date, from user etc. Users can search their mailbox on various fields based on JAVA Mail API search.
- **Folder Management** – Users can create, rename and delete folders to manage email to easily organize their mailbox.
- **Drag and Drop support for emails and contacts (Under development)** – User can move email and contacts to and from

folders and categories by drag and drop. This feature is under development.

- **Rich HTML email editor** – Rich email editor with all the basic features. Special characters, smiley are supported.
- **Web-based Calendar/Scheduler** – Users can add events and tasks to the calendar. Users are notified when events trigger by email. (*ZK calendar component is integrated for this).
- **Comprehensive Addressbook** – Manage contacts by comprehensive address book. All the basic address fields are added. It can be extended to support new address fields. AJAX based interface allows quick navigation and modification of contact details.
- **Inline AJAX based attachment upload component** – Custom component has been developed and integrated for attachment upload in which users can watch the progress of the attachment upload. Multiple attachments also supported.
- **Timezone customization** – User timezone is detected automatically and all the dates are displayed as per that timezone. Also user can change the default timezone after login
- **Wide range of Web GUI theme support** – User can customize web interface by various themes.
- **User Signature configuration as a plain text and as a image** – Users are able to configure signature to be added while composing mails as a plain text and as a image.
- **Horizontal and vertical layout** – Horizontal as well as vertical layout support as in Outlook.
- **Quick mail preview support** – Mail preview panel support as in Outlook for quick access of email.

3 Tools/Technology used

- 1.1. JDK 1.6 - <http://www.oracle.com/technetwork/java/javase/overview/index.html>
- 1.2. JAVA Mail 1.4.3 - <http://www.oracle.com/technetwork/java/index-jsp-139225.html>
- 1.3. ZK Framework (*ZK 5.0.4 CE) - <http://www.zkoss.org/>
- 1.4. MySQL database - <http://www.mysql.com/>

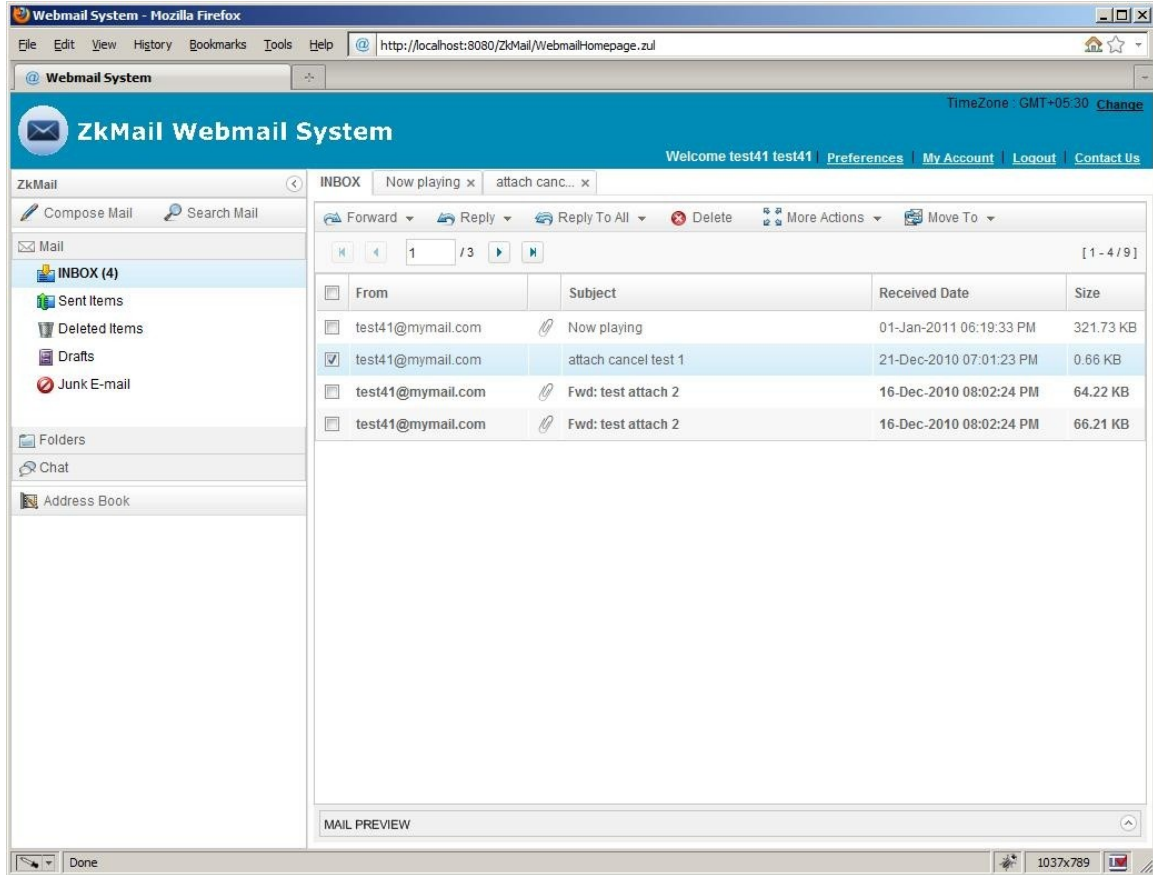
4 Deployment

ZkMail.war	Deploy war file in any J2EE compliant web container/application server
db_tables.sql	Execute sql file in mysql server to create required database tables
DBConnection.properties	Update property file to point to database server in war file
Constants.properties	Update property file to point to mail server address in war file

*Note: ZK 5.0.4 CE is available under LGPL. ZK Calendar is available under GPL.

5 Screenshots

5.1 Homepage with default theme - Breeze



5.2 Homepage with folder management, preview panel and attachment.

The screenshot displays the ZkMail Webmail System interface. The browser window title is "Webmail System - Mozilla Firefox" and the address bar shows "http://localhost:8080/ZkMail/WebmailHomepage.zul". The page header includes "ZkMail Webmail System" and "Welcome test41 test41 | Preferences | My Account | Logout | Contact Us".

The main content area is titled "INBOX" and shows a list of four emails:

From	Subject	Received Date	Size
<input checked="" type="checkbox"/> test41@mymail.com	Top movies	01-Jan-2011 06:23:08 PM	294.54 KB
<input type="checkbox"/> test41@mymail.com	Now playing	01-Jan-2011 06:19:33 PM	321.73 KB
<input type="checkbox"/> test41@mymail.com	attach cancel test 1	21-Dec-2010 07:01:23 PM	0.66 KB
<input type="checkbox"/> test41@mymail.com	Fwd: test attach 2	16-Dec-2010 08:02:24 PM	66.21 KB

Below the email list is a "Mail Preview" section with a table:

Rank	Title	Weekend	Gross
1	Little Fockers (2010)	\$30.8M	\$45.1M
2	True Grit (2010)	\$24.9M	\$36.1M
3	TRON: Legacy (2010)	\$19.2M	\$87.4M
4	The Chronicles of Narnia: The Voyage of the Dawn Treader (2010)	\$9.48M	\$62.6M
5	Yogi Bear (2010)	\$7.83M	\$35.8M
6	The Fighter (2010)	\$7.61M	\$26.7M
7	Tangled (2010)	\$6.43M	\$144M
8	Gulliver's Travels (2010)	\$6.31M	\$6.31M
9	Black Swan (2010)	\$6.25M	\$38.7M

At the bottom of the preview panel, there is an attachment: "Untitled.jpg (287.91 KB)".

The sidebar on the left contains "Compose Mail", "Search Mail", "Mail", "Folders" (with "Create", "Edit", "Delete" buttons), "Chat", and "Address Book".

5.3 Folder management

The screenshot displays the ZkMail Webmail System interface within a Mozilla Firefox browser window. The browser's address bar shows the URL `http://localhost:8080/ZkMail/Webmailhomepage.zul`. The page title is "Webmail System" and the user is logged in as "test41 test41". The interface includes a navigation menu on the left with options like "Compose Mail", "Search Mail", "Mail", "Folders", "Create", "Edit", "Delete", "Chat", and "Address Book". The main content area shows the "Inbox" with a list of emails. A "Move To" dropdown menu is open, showing options for "JAVA", "Misc", and "Personal". The email list is as follows:

<input type="checkbox"/>	From	Subject	R	Size
<input checked="" type="checkbox"/>	test41@mymail.com	Top movies		01-Jan-2011 06:23:08 PM 294.54 KB
<input type="checkbox"/>	test41@mymail.com	Now playing		01-Jan-2011 06:19:33 PM 321.73 KB
<input type="checkbox"/>	test41@mymail.com	attach cancel test 1		21-Dec-2010 07:01:23 PM 0.66 KB
<input type="checkbox"/>	test41@mymail.com	Fwd: test attach 2		16-Dec-2010 08:02:24 PM 66.21 KB

The status bar at the bottom of the browser shows "javascript:;" and the system tray displays "1052x792".

5.4 Chat module

The screenshot displays the ZkMail Webmail System interface within a Mozilla Firefox browser window. The browser address bar shows the URL `http://localhost:8080/ZkMail/WebmailHomepage.zul`. The page title is "ZkMail Webmail System" and the user is logged in as "test41 test41".

The interface includes a navigation menu on the left with options like "Compose Mail", "Search Mail", "Mail", "Folders", "Chat", and "Address Book". The "Chat" section is active, showing a list of users: "test41 test41" (Available), "admin admin", "Ishan Gajera", "Kaival Patel", and "Nirav Dhirwani".

The main content area shows the "INBOX" with a table of emails:

From	Subject	Received Date	Size
<input checked="" type="checkbox"/> test41@mymail.com	Top movies	01-Jan-2011 06:23:08 PM	294.54 KB
<input type="checkbox"/> test41@mymail.com	Now playing	01-Jan-2011 06:19:33 PM	321.73 KB
<input type="checkbox"/> test41@mymail.com	attach cancel test 1	21-Dec-2010 07:01:23 PM	0.66 KB
<input type="checkbox"/> test41@mymail.com	Fwd: test attach 2	16-Dec-2010 08:02:24 PM	66.21 KB

Below the inbox is a "Mail Preview" section listing movies:

- 1 [Little Fockers](#) (2010)
- 2 [True Grit](#) (2010)
- 3 [TRON: Legacy](#) (2010)
- 4 [The Chronicles of Narnia: The Voyage of the Dawn Treader](#) (2010)
- 5 [Yogi Bear](#) (2010)
- 6 [The Fighter](#) (2010)
- 7 [Tangled](#) (2010)
- 8 [Gulliver's Travels](#) (2010)
- 9 [Black Swan](#) (2010)
- 10 [Untitled.jpg](#) (287.91 KB)

A chat window titled "test41@mymail.com" is overlaid on the right side of the interface. It shows a conversation:

test41 x

test41 : Hi

test41 : Hi

The status bar at the bottom indicates "Transferring data from localhost..." and shows the IP address "1037x789".

5.5 Folder management

The screenshot displays the ZkMail Webmail System interface in a Mozilla Firefox browser window. The browser's address bar shows the URL `http://localhost:8080/ZkMail/Webmailhomepage.zul`. The page title is "Webmail System" and the user is logged in as "test41 test41". The interface includes a navigation menu on the left with options like "Compose Mail", "Search Mail", "Mail", "Folders", "Create", "Edit", "Delete", "Chat", and "Address Book". The main content area shows the "Inbox" with a list of emails. A "Move To" dropdown menu is open, showing options for "JAVA", "Misc", and "Personal". The email list is as follows:

<input type="checkbox"/>	From	Subject	R	Size
<input checked="" type="checkbox"/>	test41@mymail.com	Top movies		01-Jan-2011 06:23:08 PM 294.54 KB
<input type="checkbox"/>	test41@mymail.com	Now playing		01-Jan-2011 06:19:33 PM 321.73 KB
<input type="checkbox"/>	test41@mymail.com	attach cancel test 1		21-Dec-2010 07:01:23 PM 0.66 KB
<input type="checkbox"/>	test41@mymail.com	Fwd: test attach 2		16-Dec-2010 08:02:24 PM 66.21 KB

The "MAIL PREVIEW" section is visible at the bottom of the email list.

5.6 Event scheduler/calendar

The screenshot displays the ZkMail Webmail System interface within a Mozilla Firefox browser window. The browser's address bar shows the URL `http://localhost:8080/ZkMail/WebmailHomepage.zul`. The page title is "Webmail System".

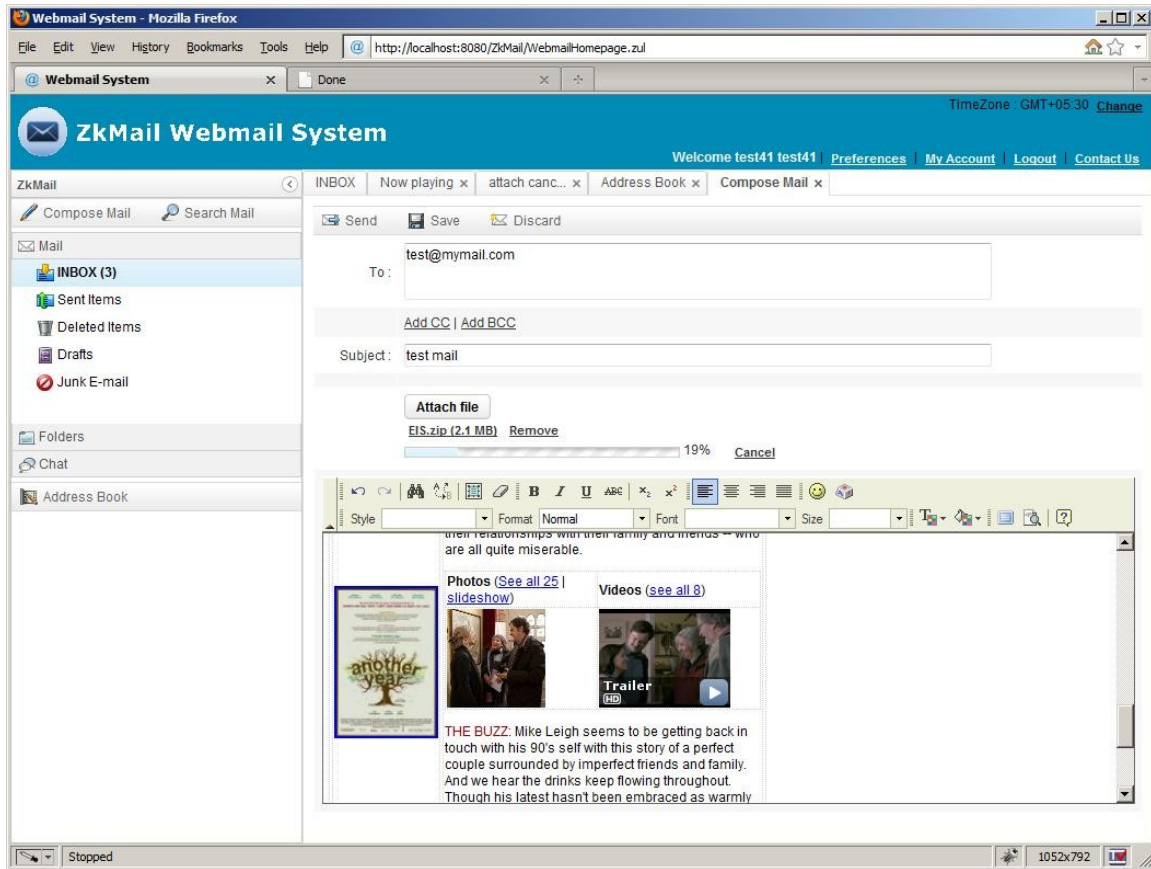
The main header of the webmail system includes the "ZkMail Webmail System" logo, the user name "Welcome test41 test41", and navigation links for "Preferences", "My Account", "Logout", and "Contact Us". The time zone is set to "GMT+05:30".

The interface is divided into several sections:

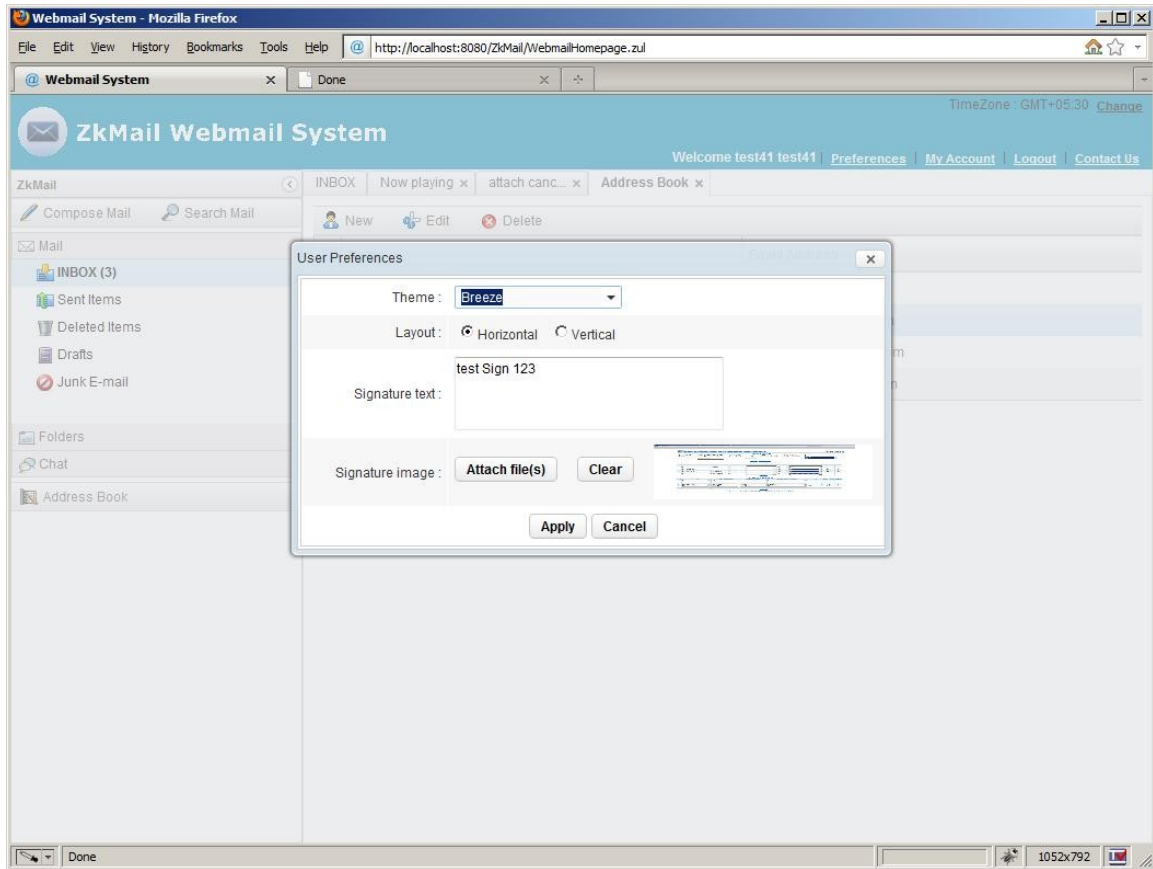
- Left Sidebar:** Contains navigation options for "Compose Mail", "Search Mail", "Mail" (with sub-items: INBOX (3), Sent Items, Deleted Items, Drafts, Junk E-mail), "Folders", "Chat", "Address Book", and "Event Scheduler".
- Event Scheduler:** A calendar view for the week of 05-Dec-2010 to 12-Dec-2010. The current view is "today". The calendar shows a red event "meeting" from 01:00 to 02:00 on Sunday, Dec 5, and a green event "test" from 03:30 to 04:30 on Monday, Dec 6. A modal "Edit Event" window is open over the "test" event, showing fields for "BeginDate" (Dec 6, 2010, 03:30), "EndDate" (Dec 6, 2010, 04:30), "Color" (Green), "Content" (test), and an "Unmodifiable" checkbox. The "Submit" buttons are "OK", "Cancel", and "Delete".

The status bar at the bottom of the browser window shows "Done" and the system tray icon "1052x792".

5.7 Compose mail with attachment upload



5.8 User Preferences



5.9 Address book

The screenshot shows the ZkMail Webmail System interface in a Mozilla Firefox browser window. The browser address bar shows the URL `http://localhost:8080/ZkMail/Webmailhomepage.zul`. The page title is "Webmail System". The main header area displays "ZkMail Webmail System" and a welcome message "Welcome test41 test41" with links for "Preferences", "My Account", "Logout", and "Contact Us". The time zone is set to "GMT+05:30".

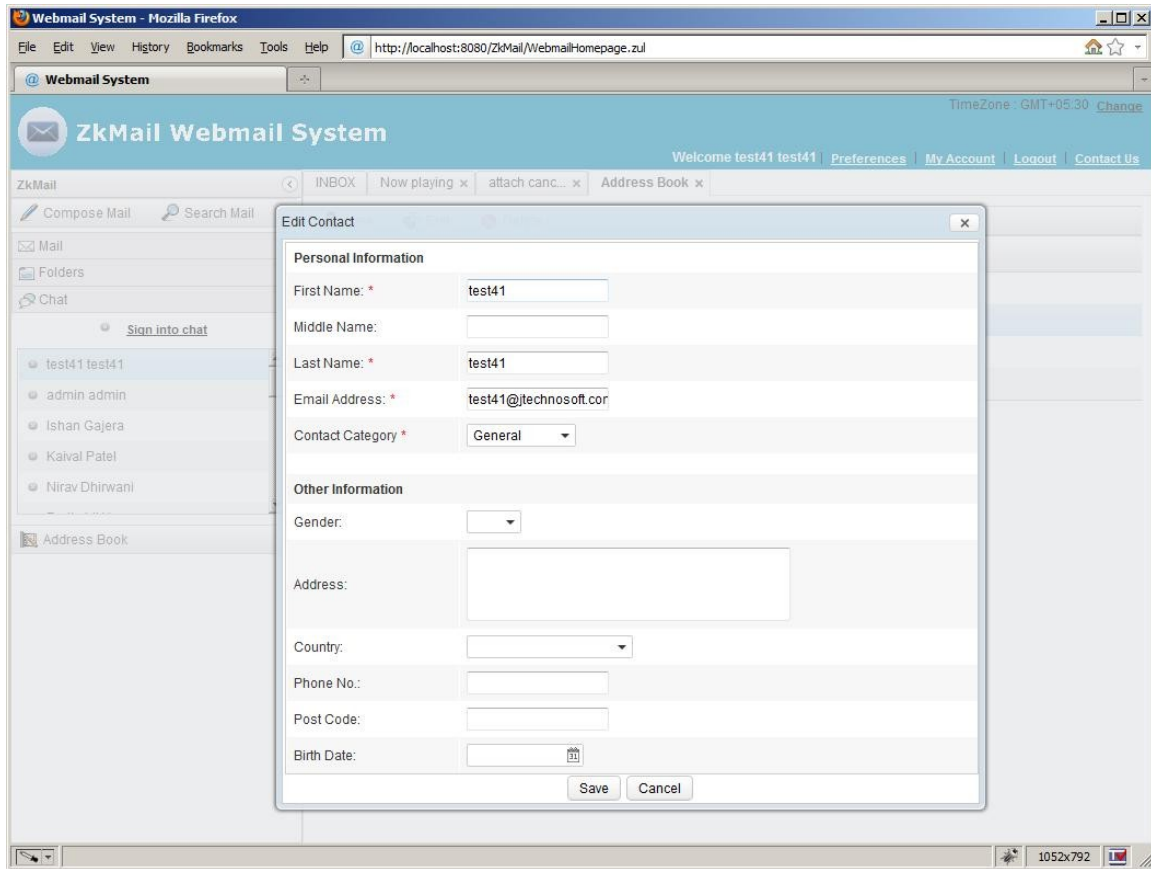
The interface is divided into several sections:

- Left Sidebar:** Contains navigation options: "Compose Mail", "Search Mail", "Mail", "Folders", "Chat", and "Sign into chat". Under "Sign into chat", there is a list of users: "test41 test41", "admin admin", "Ishan Gajera", "Kaival Patel", and "Nirav Dhirwani". Below this is an "Address Book" section.
- Top Navigation:** Shows "INBOX", "Now playing x", "attach canc... x", and "Address Book x".
- Address Book Table:** A table with columns "Name" and "Email Address". It contains the following entries:

Name	Email Address
<input checked="" type="checkbox"/> sanket1 patel	sanket1.p@lcs.com
<input checked="" type="checkbox"/> test41 test41	test41@technosoft.com
<input type="checkbox"/> test41111 test411	test41@techno.japik.com
<input type="checkbox"/> test4123 test41	test41@techno.japik.om

The bottom status bar shows "javascript:;" and "1052x792".

5.10 Address book with create/edit contact



5.11 Theme – ZK default

The screenshot displays the ZkMail Webmail System interface. The browser window title is "Webmail System - Mozilla Firefox" and the address bar shows "http://localhost:8080/ZkMail/Webmailhomepage.zul". The page header includes "ZkMail Webmail System" and a welcome message "Welcome test41 test41" with links for "Preferences", "My Account", "Logout", and "Contact Us". The interface is divided into several sections:

- Left Sidebar:** Contains navigation options: "Compose Mail", "Search Mail", "Mail" (with a sub-menu for "INBOX (3)", "Sent Items", "Deleted Items", "Drafts", "Junk E-mail"), "Folders", "Chat", and "Address Book".
- Top Action Bar:** Includes "Forward", "Reply", "Reply To All", "Delete", "More Actions", and "Move To".
- Inbox Table:** A table listing three emails with columns for "From", "Subject", "Received Date", and "Size".
- Bottom Section:** Labeled "MAIL PREVIEW".
- Status Bar:** Shows "Done" and the system ID "1052x792".

From	Subject	Received Date	Size
test41@mymail.com	Top movies	01-Jan-2011 06:23:08 PM	294.54 KB
test41@mymail.com	Now playing	01-Jan-2011 06:19:33 PM	321.73 KB
test41@mymail.com	attach cancel test 1	21-Dec-2010 07:01:23 PM	0.66 KB
test41@mymail.com	Fwd: test attach 2	16-Dec-2010 08:02:24 PM	66.21 KB

5.12 Theme – Blue

Webmail System - Mozilla Firefox
http://localhost:8080/ZkMail/Webmailhomepage.zul

Webmail System
TimeZone: GMT+05:30 Change

ZkMail Webmail System
Welcome test41 test41 | [Preferences](#) | [My Account](#) | [Logout](#) | [Contact Us](#)

ZkMail
Compose Mail Search Mail

Mail
Folders
Chat
Available
test41 test41
admin admin
Ishan Gajera
Kaival Patel
Nirav Dhirwani
Parikshit Vyas
Pradeep Haldiya
pshahnd pshahnd

Address Book

Inbox
Forward Reply Reply To All Delete More Actions Move To

From	Subject	Received Date	Size
test41@mymail.com	Top movies	01-Jan-2011 06:23:08 PM	294.54 KB
test41@mymail.com	Now playing	01-Jan-2011 06:19:33 PM	321.73 KB
test41@mymail.com	attach cancel test 1	21-Dec-2010 07:01:23 PM	0.66 KB
test41@mymail.com	Fwd: test attach 2	16-Dec-2010 08:02:24 PM	66.21 KB

Mail Preview
Now playing
From: test41@mymail.com

test41@mymail.com 01-Jan-2011 06:19:33 PM

test41 x

Untitled.jpg (287.91 KB)

Done 1052x792

5.13 Theme – Teal

The screenshot displays the ZkMail Webmail System interface within a Mozilla Firefox browser window. The browser's address bar shows the URL `http://localhost:8080/ZkMail/Webmailhomepage.zul`. The page title is "Webmail System".

The interface is divided into several sections:

- Header:** Displays "ZkMail Webmail System" and a welcome message "Welcome test41 test41". It also includes links for "Preferences", "My Account", "Logout", and "Contact Us".
- Navigation:** A sidebar on the left contains "Compose Mail", "Search Mail", "Mail" (with "INBOX (3)" selected), "Sent Items", "Deleted Items", "Drafts", "Junk E-mail", "Folders", "Chat", and "Address Book".
- Inbox:** A table lists incoming emails with columns for "From", "Subject", "Received Date", and "Size".
- Mail Preview:** A section below the inbox showing a list of movies with columns for "Rank", "Title", "Weekend", and "Gross".

From	Subject	Received Date	Size
test41@mymail.com	Top movies	01-Jan-2011 06:23:08 PM	294.54 KB
test41@mymail.com	Now playing	01-Jan-2011 06:19:33 PM	321.73 KB
test41@mymail.com	attach cancel test 1	21-Dec-2010 07:01:23 PM	0.66 KB
test41@mymail.com	Fwd: test attach 2	16-Dec-2010 08:02:24 PM	66.21 KB

Rank	Title	Weekend	Gross
1	Little Fockers (2010)	\$30.8M	\$45.1M
2	True Grit (2010)	\$24.9M	\$36.1M
3	TRON: Legacy (2010)	\$19.2M	\$87.4M
4	The Chronicles of Narnia: The Voyage of the Dawn Treader (2010)	\$9.48M	\$62.6M
5	Yogi B ear (2010)	\$7.83M	\$35.8M
6	The Fighter (2010)	\$7.61M	\$26.7M
7	Tangled (2010)	\$6.43M	\$144M
8	Gulliver's Travels (2010)	\$6.31M	\$6.31M
9	Dead Space (2010)	\$6.25M	\$28.7M

5.14 Theme – Green

The screenshot displays the ZkMail Webmail System interface in a Mozilla Firefox browser window. The browser's address bar shows the URL `http://localhost:8080/ZkMail/Webmailhomepage.zul`. The page title is "Webmail System".

The main interface features a green header with the ZkMail logo and the text "ZkMail Webmail System". Below the header, there is a navigation bar with links for "Welcome test41 test41", "Preferences", "My Account", "Logout", and "Contact Us".

The interface is divided into several sections:

- Left Sidebar:** Contains "Compose Mail", "Search Mail", "Mail", "Folders", "Chat", and "Address Book". A "Busy" status indicator is visible.
- Top Action Bar:** Includes "Forward", "Reply", "Reply To All", "Delete", "More Actions", and "Move To" buttons.
- Inbox Table:** Displays a list of emails with columns for "From", "Subject", "Received Date", and "Size".

From	Subject	Received Date	Size
test41@mymail.com	attach cancel test 1	21-Dec-2010 07:01:23 PM	0.66 KB
test41@mymail.com	Fwd: test attach 2	16-Dec-2010 08:02:24 PM	66.21 KB
- Chat Window:** A small window titled "test41@mymail.com" is open, showing a chat log with messages from "test41":
 - test41 : how are you?
 - test41 : how are you?
 - test41 : doing good
 - test41 : doing good
- Bottom:** A "MAIL PREVIEW" section is visible at the bottom of the main content area.