



# **SGG 3643**

## **Computer Programming III**

### **Frameset and Frames**

Ivin Amri Musliman



# Frames: Overview

- display more than one HTML document in the same browser window.
- Each HTML document is called a frame, and each frame is independent of the others.
- Disadvantages of using frames:
  - You have to keep track of more HTML documents
  - It is difficult to print the entire page
  - They can not easily be bookmarked.
  - They can not easily found by search engines.



# Frames

- Frames were developed as an extension to HTML 3.2 and are supported by the newer Netscape and IE browsers (3.0 and up).
- They create bookmarking and printing problems, so many designers avoid using them.



# Frames

- Benefits of Frames:
  - Allow content pages to be developed independently of navigation pages
  - Allow the user to scroll through content without scrolling the navigation and identification areas out of sight; navigation and identification areas are always available



# Frames

- Limitations of Frames:
  - Present usability problems for tasks such as printing, bookmarking, searching, and using the browser back button
  - May necessitate a no-frames version of your site to provide accessibility for users with older browsers or those with disabilities who use assistive technologies
  - Add more complexity

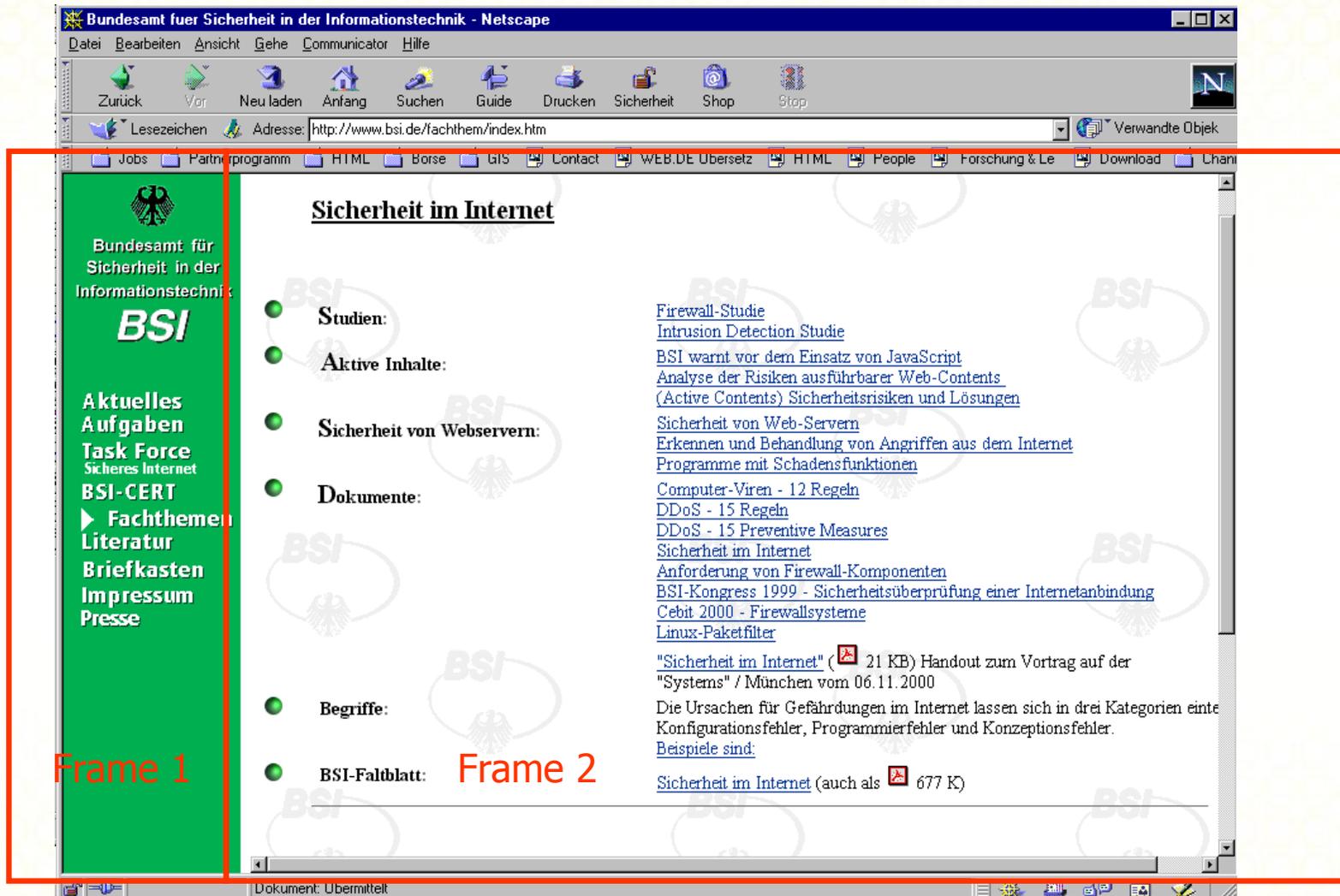


# Framesets, Frames and Webpage

- Frames permit a Web page to be divided into individual areas (almost like sub-windows)
- Two steps:
  - Develop the frame page itself.
    - This page does not contain text (content).
    - It only contains the tessellation of the browser window into frames.
    - The user enters the URL of this frame set page in the browser.
  - Develop “normal” web pages. Their content shall be displayed in the frames.



# Frame Example I



**Bundesamt fuer Sicherheit in der Informationstechnik - Netscape**

Adresse: <http://www.bsi.de/fachthem/index.htm>

**Sicherheit im Internet**

**Frame 1**

Bundesamt für Sicherheit in der Informationstechnik  
**BSI**

Aktuelles  
Aufgaben  
Task Force  
Sicheres Internet  
BSI-CERT  
▶ Fachthemen  
Literatur  
Briefkasten  
Impressum  
Presse

**Frame 2**

**Studien:**  
[Firewall-Studie](#)  
[Intrusion Detection Studie](#)

**Aktive Inhalte:**  
[BSI warnt vor dem Einsatz von JavaScript](#)  
[Analyse der Risiken ausführbarer Web-Contents \(Active Contents\) Sicherheitsrisiken und Lösungen](#)

**Sicherheit von Webservern:**  
[Sicherheit von Web-Servern](#)  
[Erkennen und Behandlung von Angriffen aus dem Internet](#)  
[Programme mit Schadensfunktionen](#)

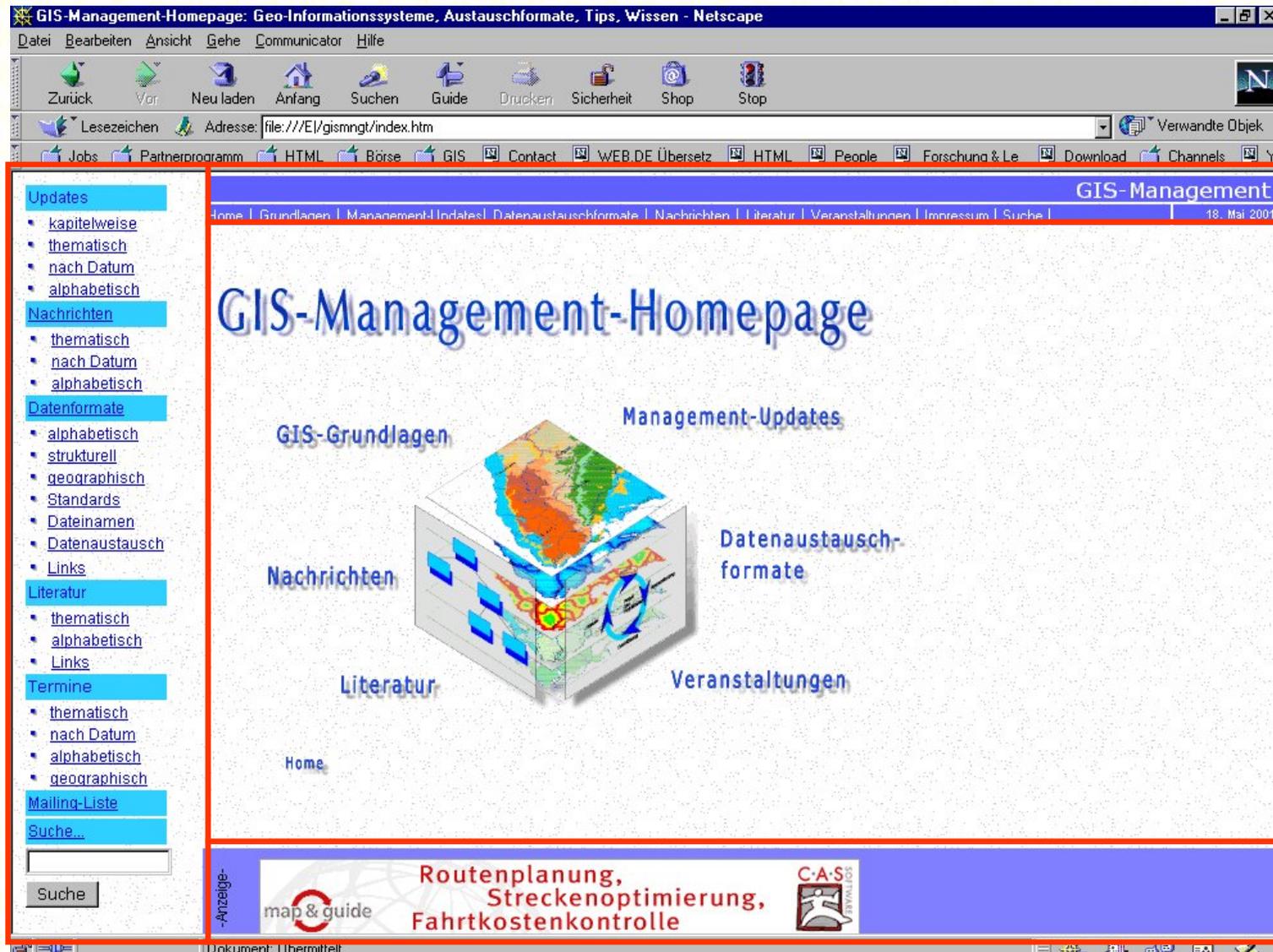
**Dokumente:**  
[Computer-Viren - 12 Regeln](#)  
[DDoS - 15 Regeln](#)  
[DDoS - 15 Preventive Measures](#)  
[Sicherheit im Internet](#)  
[Anforderung von Firewall-Komponenten](#)  
[BSI-Kongress 1999 - Sicherheitsüberprüfung einer Internetanbindung](#)  
[Cebit 2000 - Firewallssysteme](#)  
[Linux-Paketfilter](#)

**Begriffe:**  
"Sicherheit im Internet" (21 KB) Handout zum Vortrag auf der "Systems" / München vom 06.11.2000  
Die Ursachen für Gefährdungen im Internet lassen sich in drei Kategorien einteilen: Konfigurationsfehler, Programmierfehler und Konzeptionsfehler.  
[Beispiele sind:](#)

**BSI-Faltblatt:** [Sicherheit im Internet](#) (auch als 677 K)



# Frame Example II



**GIS-Management-Homepage: Geo-Informationssysteme, Austauschformate, Tips, Wissen - Netscape**

File Bearbeiten Ansicht Gehe Communicator Hilfe

Zurück Vor Neu laden Anfang Suchen Guide Drucken Sicherheit Shop Stop

Adresse: file:///E:/gismngt/index.htm

Jobs Partnerprogramm HTML Börse GIS Contact WEB.DE Übersetz HTML People Forschung & Le Download Channels Y

**GIS-Management**

Home | Grundlagen | Management-Updates | Datenaustauschformate | Nachrichten | Literatur | Veranstaltungen | Impressum | Suche | 18. Mai 2001

## GIS-Management-Homepage

GIS-Grundlagen Management-Updates

Datenaustauschformate

Nachrichten

Literatur Veranstaltungen

Home

**Updates**

- kapitelweise
- thematisch
- nach Datum
- alphabetisch

**Nachrichten**

- thematisch
- nach Datum
- alphabetisch

**Datenformate**

- alphabetisch
- strukturell
- geographisch
- Standards
- Dateinamen
- Datenaustausch
- Links

**Literatur**

- thematisch
- alphabetisch
- Links

**Termine**

- thematisch
- nach Datum
- alphabetisch
- geographisch

**Mailing-Liste**

**Suche...**

Suche

**Anzeige-**

map & guide

Routenplanung, Streckenoptimierung, Fahrtkostenkontrolle

C-A-S



# Frame Pages: Structure

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
  "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
  <title>Framepage</title>
</head>
<frameset cols="20%,80%">
  <frame name="navi" src="navigation.html" />
  <frame name="mainframe" src="content.html" />
</frameset>
<noframes>
<body>
<p>This will be shown if browser does not support frames.</p>
</body>
</noframes>
</html>
```



# Frame Pages: Structure

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
  "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
  <title>Framepage</title>
</head>
<frameset cols="20%,80%">
  <frame name="navi" src="navigation.html" />
  <frame name="mainframe" src="content.html" />
</frameset>
<noframes>
<body>
<p>This will be shown if browser does not support frames.</p>
</body>
</noframes>
</html>
```

**Frameset-Definition, Two columns**



# Frame Pages: Structure

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
  "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
  <title>Framepage</title>
</head>
<frameset cols="20%,80%">
  <frame name="navi" src="navigation.html" />
  <frame name="mainframe" src="content.html" />
</frameset>
<noframes>
<body>
<p>This will be shown if browser does not support frames.</p>
</body>
</noframes>
</html>
```

Definition of the single Frames



# Frame Pages: Structure

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
  "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
  <title>Framepage</title>
</head>
<frameset cols="20%,80%">
  <frame name="navi" src="navigation.html" />
  <frame name="mainframe" src="content.html" />
</frameset>
<noframes>
<body>
<p>This will be shown if browser does not support frames.</p>
</body>
</noframes>
</html>
```

↑  
Noframes section, including <body> ... </body>

# Frameset: Structure

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"  
  "http://www.w3.org/TR/html4/frameset.dtd">
```

```
<html>
```

```
<head>
```

```
  <title>Framepage</title>
```

```
</head>
```

```
<frameset cols="20%,80%">
```

```
  <frame name="navi" src="navigation.html" />
```

```
  <frame name="mainframe" src="content.html" />
```

```
</frameset>
```

```
<noframes>
```

```
<body>
```

```
<p>This will be shown if browser does not support frames.</p>
```

```
</body>
```

```
</noframes>
```

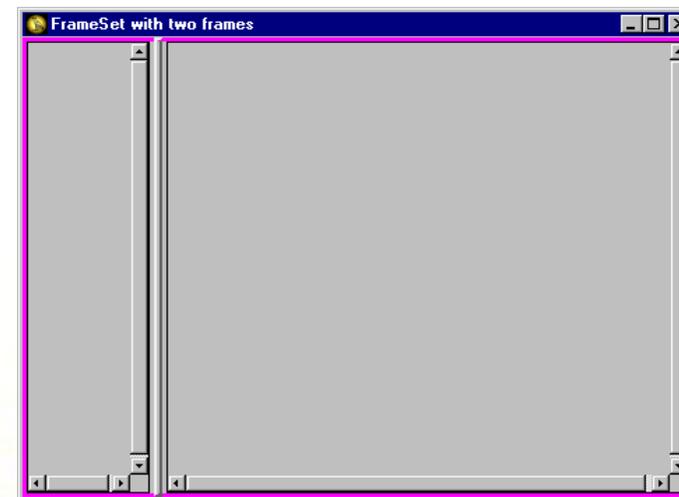
```
</html>
```

Use corresponding Document Type Definition!

# Frameset with two windows

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN"
  "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
  <title>FrameSet with two frames</title>
</head>
<frameset cols="20%,80%">
  <frame src="toc.htm" name="toc_frame">
  <frame src="detail.htm" name="detailframe">
</frameset>

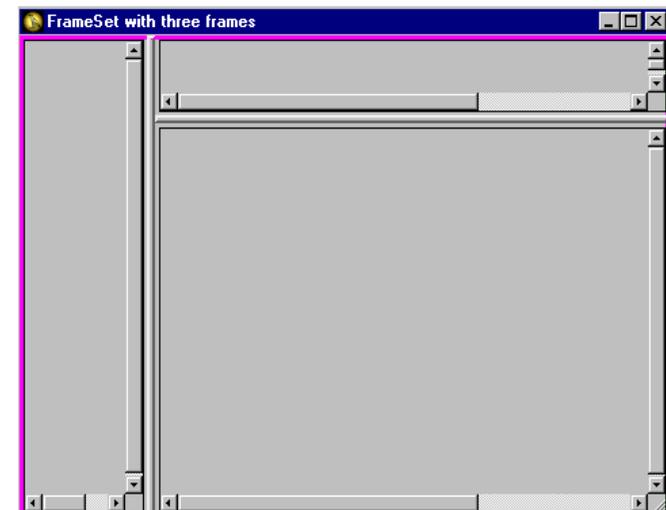
<noframes>
<body>
<p>
</body></noframes></html>
```



# Frameset with three windows I

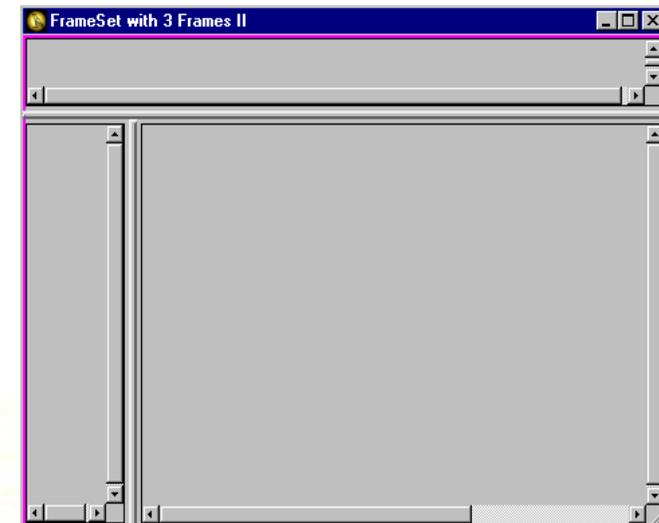
```
<!doctype html public "-//W3C//DTD HTML 4.01 Frameset//EN"
    "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
  <title>FrameSet with three frames</title>
</head>
<frameset cols="20%,80%">
  <frame src="toc.htm" name="toc_frame">
  <frameset rows="17%,83%">
    <frame src="top.htm" name="topframe.htm">
    <frame src="detail.htm" name="detailframe">
  </frameset>
</frameset>

<noframes>
<body>
<p>
</body></noframes></html>
```



# Frameset with three windows II

```
<!doctype html public "-//W3C//DTD HTML 4.01 Frameset//EN"
    "http://www.w3.org/TR/html4/frameset.dtd">
<html>
<head>
  <title>FrameSet with 3 Frames II</title>
</head>
<frameset rows="16%,84%">
  <frame src="top.htm" name="topframe">
  <frameset cols="17%,83%">
    <frame src="toc.htm" name="tocframe">
    <frame src="detail.htm" name="detailframe">
  </frameset>
</frameset>
</html>
</noframes>
<body>
<p>
</body></noframes></html>
```



## Frame set design

- Spacing : `<frameset framespacing="0" ...`
- To suppress frame borders in IE consequently  
`frameborder="0" framespacing="0"`
- Only `frameborder="0"` : IE shows space between the different frames.
- To suppress borders in IE and Netscape specify all three attribute:  
`frameborder="0" framespacing="0"`  
`border="0"`
- “Try and error!”

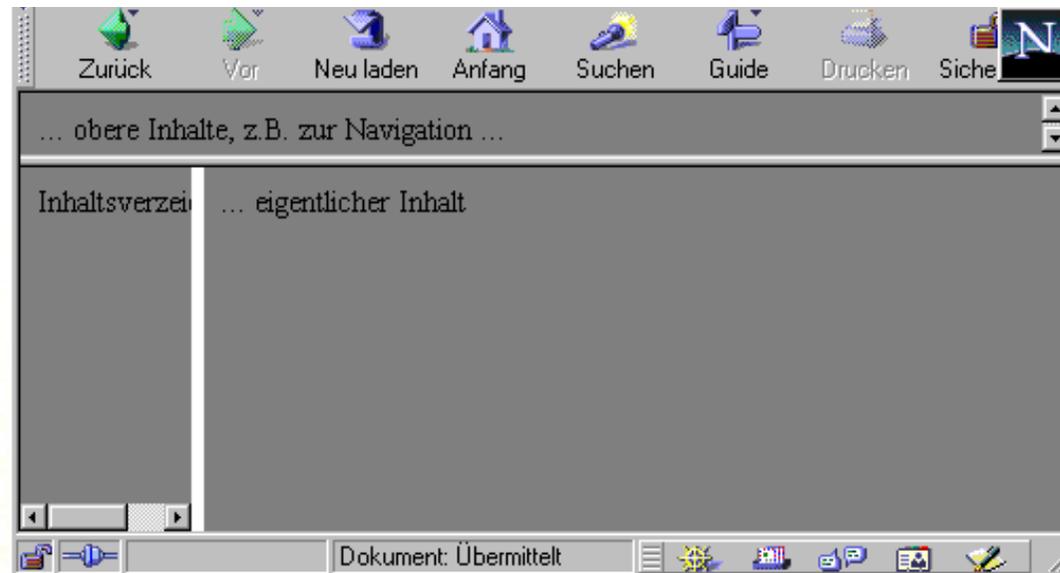
# Design of single frames

- Frame and content definition:  
`<frame src="seite1.html" />`
- Show / Hide borders:  
`<frame frameborder="0" or`  
`<frameset cols="40%,60%" border="0"`  
`frameborder="0" framespacing="0"...`
- Frame not resizable:  
`<frame noresize="noresize" ...`
- Margins:  
`<frame marginwidth="20px" marginheight="20px"`  
`...`  
Recommended: 0 (content will fill frame completely).
- Show / Hide scroll bars:  
`<frame scrolling="no" | "no" | "auto"`



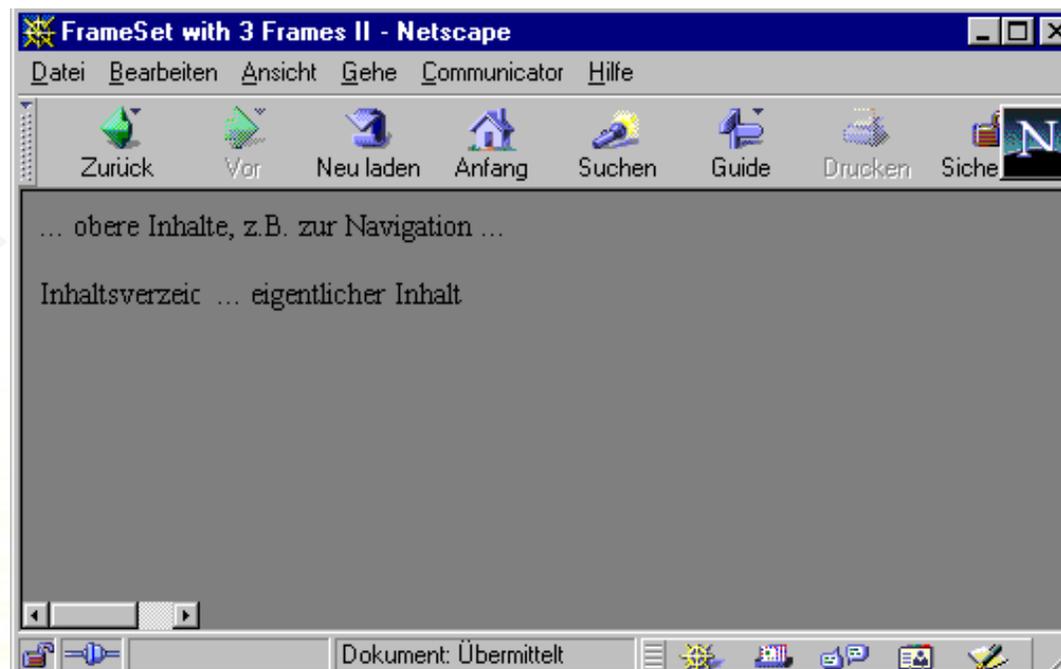
# Frameset-Design: Example I

```
<frameset rows="16%,84%">  
  <frame src="top.htm" name="topframe">  
  <frameset cols="17%,83%" frameborder="0" framespacing="0" border="0" >  
    <frame src="toc.htm" name="tocframe">  
    <frame src="detail.htm" name="detailframe">  
  </frameset>  
</frameset>
```



## Frameset-Design: Example II

```
<frameset rows="16%,84%" frameborder="0" framespacing="0" border="0">  
  <frame src="top.htm" name="topframe">  
  <frameset cols="17%,83%" frameborder="0" framespacing="0" border="0">  
    <frame src="toc.htm" name="tocframe" marginwidth="0">  
    <frame src="detail.htm" name="detailframe" marginwidth="0">  
  </frameset>  
</frameset>
```



# Linking to Target Frames

- Link to HTML page in a frame:

```
<a href="detail2.htm" target="detailframe" />
```

- Standard names for `target`:

- `_self`: File is opened in the same frame / browser window
- `_parent`: File is opened in the parent frame / window
- `_top`: File is displayed in the current browser window

- To define the target frame for the whole site:

```
<head>    ...  
    <base target="detailframe" />  
</head>
```

- All links are displayed in the frame named `detailframe`.
- Other targets can be explicitly defined (as shown above).