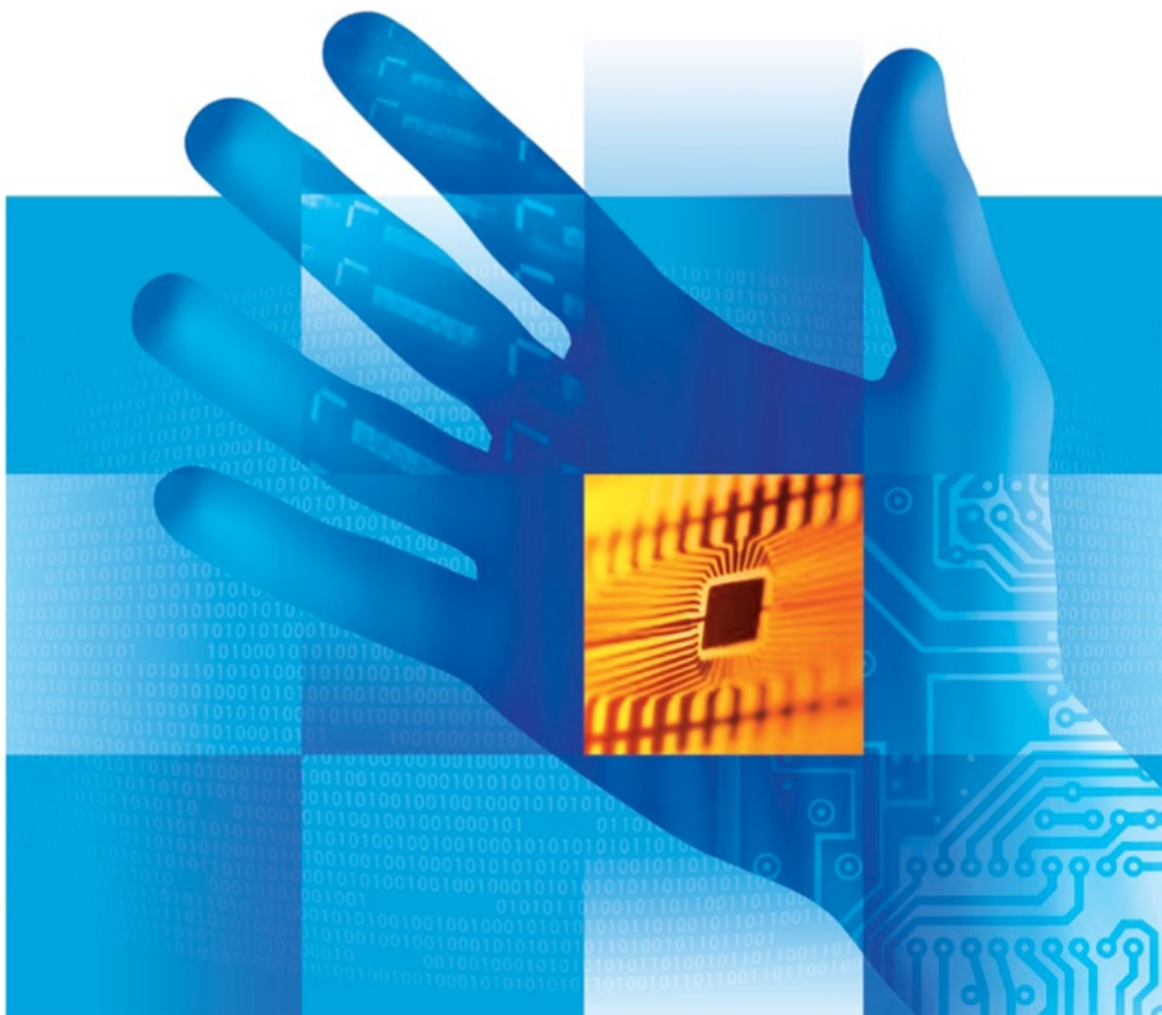




Úvodní informace

TAMZ 1

1. cvičení



Bezpečnost práce na A1028 a požadavky

- Platné školení bezpečnosti práce v laboratořích FEI
- Školení bezpečnosti práce v laboratoři
 - nutnost podepsat bezpečnostní školení, část lidí pro kontrolu namátkově přezkoušena
- Provozní řád laboratoře
- Požadavky na zápočet
 - Semestrální projekt (alespoň za 10b z 25b)
 - Nepovinné úlohy
 - Úlohy na cvičeních (10b)
 - Prezentace (10b, pro přidělení bodů nutno získat 5b)



Základní informace o laboratoři

- Síťové zásuvky
 - Školní síť – zásuvky **RD5**
 - Laboratoř – zásuvky RD1-4 (vyvedeny do odpovídajícího racku, nebudeme používat)
- Ubuntu
 - běžný uživatel: **cnap** (heslo: **cisco**)
 - superuživatel (nebudeme potřebovat): změna příkazem **su** (heslo: **cisco**)
 - **Veškeré lokálně uložené soubory a cookies jsou dočasné, po restartu jsou ztraceny!**
 - Lze připojit USB disk



Vývojová prostředí – IDE

- Netbeans 7.3+ (Ubuntu – 7.4)
 - <https://netbeans.org/downloads/>
 - HTML5, PHP (Download: ALL/PHP)
 - Vyžaduje JDK 1.7
 - **Preferovaná varianta**
- Eclipse + plugin (!) Aptana Studio 3
 - <http://www.eclipse.org/downloads/>
 - <http://aptana.com/products/studio3/>
 - Samostatná instalace AS3 může padat na novějších verzích Linuxu
- Visual Studio, Geany, gedit, vim, ...

PHP	All
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Download Download





Spouštění a ladění projektů

- Integrovaný prohlížeč WebKit (NB)
 - Okamžitá aktualizace při změně kódu
 - Přednastavené rozměry zařízení
 - Integrace konzoly při ladění
 - Menší podpora HTML5
- Google Chrome/Chromium
 - Pluginy: **NetBeans Connector**
Web Developer
Xdebug Helper
CollorZilla



NetBeans Connector 1.1

The NetBeans Connector provides deep integration between the award winning NetBeans IDE and the Google Chrome browser.



Web Developer 0.4.5

Adds a toolbar button with various web developer tools. The official port of the Web Developer extension for Firefox.



Xdebug helper 1.4.2

Easy debugging, profiling and tracing extension for Xdebug



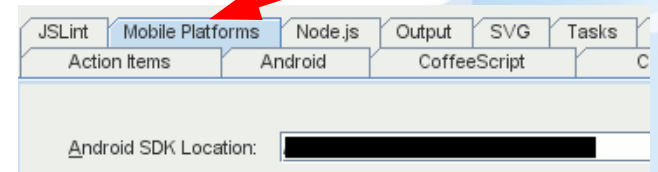
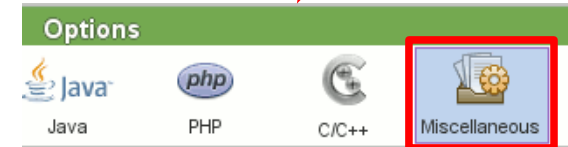
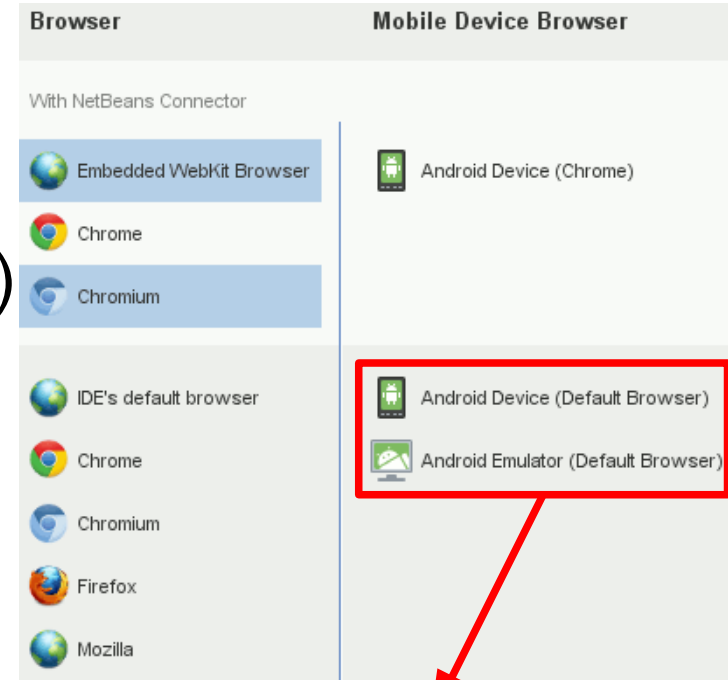
ColorZilla 0.5.4

Advanced Eyedropper, Color Picker, Gradient Generator and other colorful g



Spouštění a ladění projektů

- Emulátor platformy Android
 - Android SDK (někdy potřeba ručně upravit adresu na 10.0.2.2)
 - Genymotion (vyžaduje registraci)
- Zařízení s OS Android (vyžaduje Android SDK)
- „Oblíbený prohlížeč“
- Malé kusy kódu on-line (např. <http://jsfiddle.net/>, W3School: <http://goo.gl/n4Uaae>)



Tvorba GUI pro jQuery Mobile

- Ruční tvorba kódu
 - plná kontrola nad podobou stránky
 - složitější na zapamatování částí
 - ve výsledku rychlejší
- Rapid Interface Builder (Chrome)
 - Lokálně: Nutno spustit chrome/-ium s parametry
--allow-file-access-from-files --enable-file-cookies
 - ZIP: <http://home1.vsb.cz/~mor03/TAMZ/RIB.tgz>
 - Od roku 2012 nebyl aktualizován, vhodný zejména pro začátečníky, pouze export
 - Některé konstrukce jsou již „deprecated“
 - <http://www2.cs.vsb.cz/moravec/TAMZ/RIB/>

Rapid Interface Builder

The screenshot displays the Rapid Interface Builder web application. The browser address bar shows the URL <https://01.org/rib/online/>. The application interface includes a top navigation bar with tabs for LAYOUT, CODE, and PREVIEW, along with standard editing tools like Undo, Redo, Cut, Copy, and Paste. On the right, there are links for PROJECT SETTINGS, EXPORT, and ABOUT.

The main workspace is divided into three primary sections:

- PAGES (Left Sidebar):** A tree view showing the page structure. The current page is labeled "Page (page1)" and contains a list of elements: Header, Button, Checkbox, Button Group (containing three Buttons), Form, and Footer. A second page, "Page (page2)", is also listed with its own Header and Footer.
- PAGE PROPERTIES (Bottom Left):** A panel for configuring the selected page. It includes fields for ID (set to "page1"), Background, Theme (set to "default"), and Title. A "Delete Element" button is also present.
- WIDGET CATEGORIES (Right Sidebar):** A list of widget categories for selection, including Functional Groups, Form Elements, and Widgets. The Widgets section is expanded, showing various components such as Custom Header, Footer, Navbar, Button, Button Group, Grid, Collapsible Section, Accordion, Toggle Switch, Radio Button, Radio Group, Checkbox, Checkbox Group, Unordered List, and Ordered List.

The central canvas displays a preview of the page layout, titled "Page-1". It features a header, a main content area with a "Drop Widgets Here..." prompt, and a footer. The content area is populated with a single Button, a Checkbox, a Button Group containing three Buttons, a Form with a "Drop Widgets Here..." prompt, and a Footer with a "Drop Widgets Here..." prompt.

Rapid Interface Builder

The screenshot displays the Rapid Interface Builder (RIB) web application. The interface is divided into several sections:

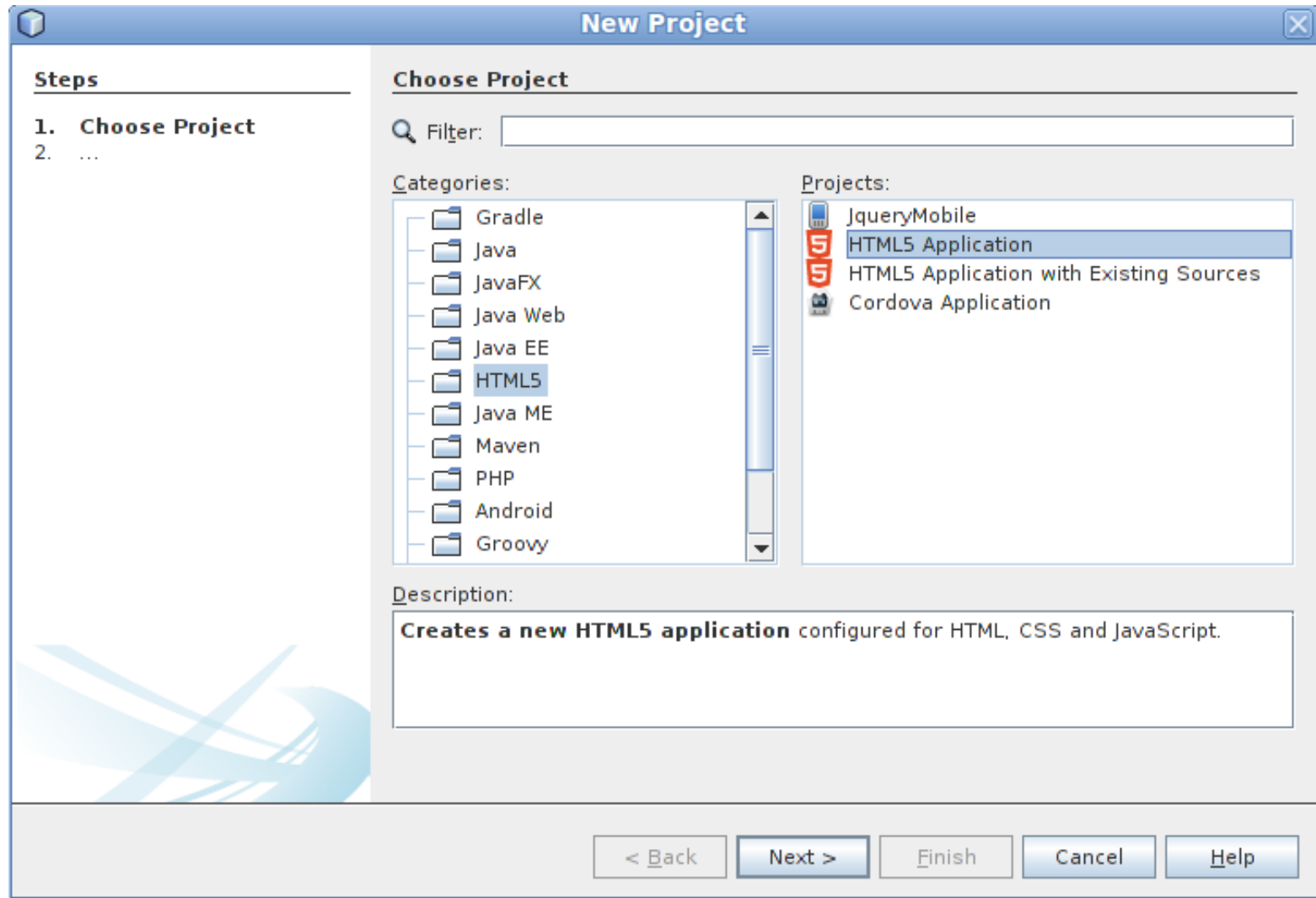
- Navigation:** At the top, there are tabs for "LAYOUT", "CODE", and "PREVIEW". The "CODE" tab is currently selected, indicated by a red arrow pointing to it.
- Pages Panel:** On the left, a "PAGES" panel shows a tree view of the page structure, including "Page 1", "Header", "Button", "Checkbox", and "Button Group".
- Visual Editor:** The central area shows a visual representation of the page layout. It includes a "Header" section, a main content area with a "Drop Widgets Here." prompt, and a "Footer" section. A "Button" widget is visible in the content area.
- Code Editor:** Below the visual editor, a code editor displays the HTML code for the page. The code includes meta tags, jQuery and jQuery Mobile scripts, and HTML elements for the header, content, and footer. A red arrow points from the "CODE" tab to this editor.
- Widget Categories:** On the right, a "WIDGET CATEGORIES" panel lists various widget types such as "Functional Groups", "Form Elements", and "List Views".
- Widget Palette:** Below the categories, a "WIDGETS" panel shows a collection of interactive widgets, including "Custom Header", "Toggle Switch", "Radio Button", "Radio Group", "Checkbox", "Checkbox Group", "Grid", "Collapsible Section", "Unordered List", "Ordered List", and "Accordion".

```
<code><html><title></title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<script src="//lib/jquery-1.6.4.js"></script>
<script src="//lib/jquery.mobile-1.1.0.js"></script>
<link href="//css/jquery.mobile.structure-1.1.0.css" rel="stylesheet">
<link href="//css/jquery.mobile.theme-1.1.0.css" rel="stylesheet">
</head>
<body>
<div data-role="page" id="page1" data-title="Second example">
<div data-role="header">
<h1>Page-1</h1>
</div>
<div data-role="content">
<div data-role="fieldcontain">
<label for="name">Enter your name:</label>
<input type="text" id="name" placeholder="e.g. John Doe">
</div>
<div data-role="button" id="greeting" data-rel="dialog">Greet me</div>
</div>
<div data-role="dialog" id="page0" data-title="Greetings">
<div data-role="header">
<h2>Greetings</h2>
</div>
<div data-role="content">
<div class="div-widget"></div>
</div>
<div data-role="footer">
<div data-role="page" id="back" data-icon="back">Back</div>
</div>
</div>
</body></code>
```

Rapid Interface Builder

The image shows the Rapid Interface Builder (RIB) web application interface. The main window displays a design canvas for a page titled "Page-1" with various widgets like "Button" and "Checkbox". On the right side, there is a "PROJECT SETTINGS" section with an "EXPORT" button highlighted by a yellow arrow. Below this, an "Export" dialog box is shown, allowing the user to choose the export format: "zip", "json", or "wgt". The "zip" option is selected. A yellow box contains the instruction: "Rozbalit .zip do *public_html* (Netbeans project folder)". Below this, a file explorer shows a project structure for "Tamz01" with folders "lib" and "src", and files "index.html" and "tamz01.json". An arrow points from the file explorer to a preview of the generated interface, which shows the layout of "Page-1" with a "Button", "Checkbox", and three stacked "Button" elements, all within a "Page-1" container and a "Footer".

Netbeans: Založení projektu



jQuery Mobile Template

Local template

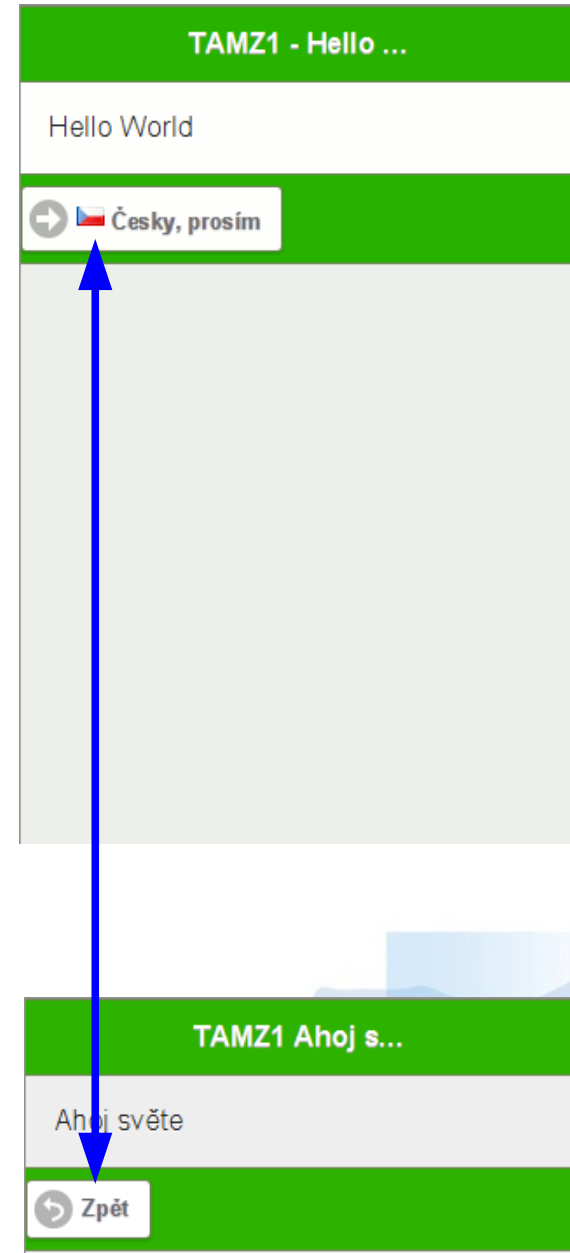
```
<!DOCTYPE html>
<html>
  <head>
    <title>
      TAMZ 1 Template with local files
    </title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <script src="js/jquery-2.1.0.js"></script>
    <script src="js/jquery.mobile-1.4.0.js"></script>
    <link rel="stylesheet" href="themes/vsb-1.4.css" />
    <link rel="stylesheet" href="themes/jquery.mobile.icons.min.css" />
    <link rel="stylesheet"
      href="themes/jquery.mobile.structure-1.4.0.min.css" />
  </head>
  <body ...12 lines />
</html>
```

CDN hosted (remote) template

```
<head>
  <title>
    TAMZ 1 Template with remote files
  </title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <script src="http://code.jquery.com/jquery-1.11.0.min.js"></script>
  <script src="http://code.jquery.com/mobile/1.4.0/jquery.mobile-1.4.0.min.js"></script>
  <link rel="stylesheet" href="http://code.jquery.com/mobile/1.4.0/jquery.mobile-1.4.0.min.css" />
</head>
```

Hello World

```
<!DOCTYPE html>
<html>
  <head ...15 lines />
  <body>
    <div data-role="page" data-theme="c" id="page1">
      <div data-role="header">
        <h1>TAMZ1 - Hello world </h1>
      </div><!--header-->
      <div class="ui-content ui-body-c" role="main">
        Hello World
      </div><!--content-->
      <div data-role="footer">
        <a data-role="button" data-icon="arrow-r" href="#page2">
           Česky, prosím</a>
        </div><!--footer-->
    </div><!--page-->
    <div data-role="page" data-theme="c" id="page2">
      <div data-role="header">
        <h1>TAMZ1 Ahoj světe</h1>
      </div><!--header-->
      <div class="ui-content" role="main">
        Ahoj světe
      </div><!--content-->
      <div data-role="footer">
        <a data-role="button" data-icon="back" data-rel="back"
          href="#page1">Zpět</a>
        </div><!--footer-->
    </div><!--page-->
  </body>
</html>
```



Hello World – page

```
<!DOCTYPE html>
<html>
  <head ...15 lines />
  <body>
    <div data-role="page" data-theme="c" id="page1">
      <div data-role="header">
        <h1>TAMZ1 - Hello world </h1>
      </div><!--header-->
      <div class="ui-content ui-body-c" role="main">
        Hello World
      </div><!--content-->
      <div data-role="footer">
        <a data-role="button" data-icon="arrow-r" href="#page2">
           Česky, prosím</a>
        </div><!--footer-->
    </div><!--page-->
    <div data-role="page" data-theme="c" id="page2">
      <div data-role="header">
        <h1>TAMZ1 Ahoj světe</h1>
      </div><!--header-->
      <div class="ui-content" role="main">
        Ahoj světe
      </div><!--content-->
      <div data-role="footer">
        <a data-role="button" data-icon="back" data-rel="back"
          href="#page1">Zpět</a>
        </div><!--footer-->
    </div><!--page-->
  </body>
</html>
```

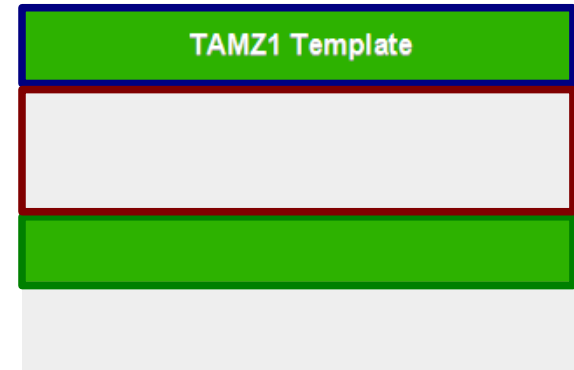
Stránka včetně
definice stránky
(ID, vzhled)

Tlačítko včetně
odkazu, ikony
(z výchozí sady)
a cíle (#ID)

Téma vzhledu:
a – světlé (výchozí)
b – tmavé
c-z – uživatelem
definované

Obecná šablona jedné stránky

```
<div data-role="page" data-theme="c" id="page1">  
  <div data-role="header">  
    <h1>TAMZ1 Template</h1>  
  </div><!--header-->  
  <div class="ui-content" role="main">  
    <br/><br/>  
  </div><!--content-->  
  <div data-role="footer">  
    <br/>  
  </div><!--footer-->  
</div><!--page-->
```

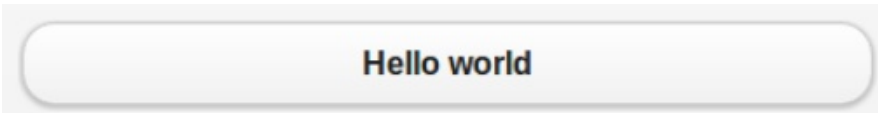


Šablona včetně Hello World je k dispozici na:
<http://homel.vsb.cz/~mor03/TAMZ/template.zip>



Tlačítka

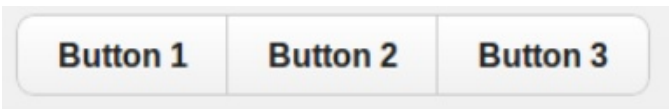
```
<a href="#" data-role="button">Hello world</a>
```



```
<a href="#" data-role="button" data-icon="check" data-iconpos="right">Hello world icon</a>
```



```
<div data-role="controlgroup" data-type="horizontal">  
  <a href="#anylink" data-role="button">Button 1</a>  
  <a href="#anylink" data-role="button">Button 2</a>  
  <a href="#anylink" data-role="button">Button 3</a>  
</div>
```



Příklad č. 2 – dynamický

```
...
<script src="js/greeter.js"></script>
...
<body>
  <div data-role="page" id="page1" data-title="Second example">
    <div data-role="header">
      <h1>TAMZ1 (Greetings)</h1>
    </div>
    <div class="ui-content" role="main">
      <div data-role="fieldcontain">
        <label for="fullName">Enter your name:</label>
        <input type="text" id="fullName" placeholder="e.g. J. Doe">
      </div>
      <a data-role="button" data-icon="alert" id="greeting"
        data-rel="dialog" href="#grdialog">Greet me!</a>
    </div>
  </div>
  <div data-role="dialog" id="grdialog" data-title="Greetings">
    <div data-role="header">
      <h1>Greetings!</h1>
    </div>
    <div data-role="content">
      <div id="greet_text"></div>
    </div>
    <div data-role="footer">
      <a data-role="button" id="back" data-icon="back" data-rel="back"
        href="history.back()">Back</a>
    </div>
  </div>
</body>
```



Odpovídající greeter.js

```
//Old syntax: $(document).delegate('#page1', 'pagecreate', function(event) {
$(document).on("pagecreate", "#page1", function(event) {
// Page1 has been created and inputs exist
    $("#greeting").click(function(e) {
        if ($("#fullName").val() === undefined || ($("#fullName").val() === "")) {
            e.preventDefault();
            alert("You did not fill your name!");
        } else {
            $("#greet_text").text("Greetings, " + ($("#fullName").val() + '!'));
        }
    });
});
});
```

- Po vytvoření stránky
 - zaregistruje akci na klik na tlačítku **greeting**
- Po kliknutí zkontroluje, zda je **fullName** vyplněno
 - Pokud ne, zabrání zobrazení dialogu a upozorní
 - Jinak zobrazí dialog s textem

