1. Introduction
2. About me
3. Local development setup options
4. Visual Studio Code and how I set it up
5. Debugging PHP code
6. Creating snippets
7. Additional tools I use

Slides are online, VS Code extensions I use and settings too.
INTRODUCTION

- Many Joomla developers use PhpStorm as IDE.
- To me PhpStorm is a bit intimidating.
- There are many other good code editors:
  - Sublime Text
  - Atom
  - Notepad++
  - Visual Studio Code
WHO AM I?

- René Kreijveld
- I work fulltime as a Joomla webdeveloper for Destiny B.V. a communication service provider.
- Member of organisation team of JUG Eindhoven.
- Regular speaker Dutch Joomla Days, Joomla User Groups and JandBeyond.
LOCAL DEVELOPMENT SETUP

• To run Joomla locally you need an Apache/MySQL/PHP stack.
• Install a database management tool.
• Install Xdebug.
• Use a code editor or an IDE.
AMP STACKS WINDOWS

- Apache Friends [https://www.apachefriends.org](https://www.apachefriends.org)
- Docker based solutions:
  - Lando [https://lando.dev/](https://lando.dev/)
- Other suggestions?
AMP STACKS MACOS

• MAMP https://www.mamp.info/en/mac
• Apache Friends https://www.apachefriends.org
• Homebrew https://github.com/renekreijveld/macOS-Local-Development-Setup
• Docker based solutions:
  • Devilbox http://devilbox.org/
  • Lando https://lando.dev
• Other suggestions?
AMP STACKS LINUX

• Apache Friends https://www.apachefriends.org
• Docker based solutions:
  • Devilbox http://devilbox.org/
  • Lando https://lando.dev
• Manual installation of apache/mysql/php
• Other suggestions?
DB MANAGEMENT TOOLS

• Browser based:
  • phpMyAdmin https://www.phpmyadmin.net/
  • Adminer https://www.adminer.org/

• Applications:
  • MySQL Workbench (Win/Mac/Linux)
    https://www.mysql.com/products/workbench/
  • HeidiSQL (Windows) https://www.heidisql.com/
  • Sequel Pro (Mac) https://www.sequelpro.com/
  • DBEaver (Win/Mac/Linux) https://dbeaver.io/
  • Navicat (Windows/Mac/Linux/iOS)
XDEBUG

• Debugger and profiler tool for PHP
• Get it at https://xdebug.org
• Two major versions:
  • 2.x
  • 3.x
• 2.x runs default on port 9000
• 3.x runs default on port 9003!
• Specify the port number in php.ini
XDEBUG 2.0 CONFIG

[xdebug]
zend_extension="xdebug.so"
xdebug.remote_enable = 1
xdebug.remote_host = localhost
xdebug.remote_handler = dbgp
xdebug.remote_port = 9000

Make sure to set the proper path to the xdebug extension!
XDEBUG 3.X CONFIG

```ini
[xdebug]
zend_extension="xdebug.so"
xdebug.mode = debug
xdebug.start_with_request = yes
xdebug.client_port = 9000
```

*Set the client port to 9000, default for Xdebug 3.0 is 9003. Make sure to set the proper path to the xdebug extension!*
VISUAL STUDIO CODE

• Code editor built by Microsoft.
• Public release 2016.
• Multi-platform: Windows, macOS, Linux.
• Multiple languages support: C++, C#, CSS, Go, HTML, Java, JSON, JavaScript, Python, PHP and many more.
• Git commands built-in.
• Highly extendable through extensions.

https://code.visualstudio.com
VISUAL STUDIO CODE

Online resources:

• https://docs.joomla.org/Visual_Studio_Code
• https://www.youtube.com
• https://www.udemy.com/topic/visual-studio-code/
• Many more ...
VISUAL STUDIO CODE

Cheat sheets:

https://code.visualstudio.com/docs/getstarted/keybindings#_keyboard-shortcuts-reference

Available for Windows, macOS and Linux.
## Visual Studio Code

### Keyboard shortcuts for macOS

### General

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⌘P, F1</td>
<td>Show Command Palette</td>
</tr>
<tr>
<td>⌘P</td>
<td>Quick Open, Go to File...</td>
</tr>
<tr>
<td>⌘N</td>
<td>New window/instance</td>
</tr>
<tr>
<td>⌘W</td>
<td>Close window/instance</td>
</tr>
<tr>
<td>⌘,</td>
<td>User Settings</td>
</tr>
<tr>
<td>⌘K ⌘S</td>
<td>Keyboard Shortcuts</td>
</tr>
</tbody>
</table>

### Basic editing

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⌘X</td>
<td>Cut line (empty selection)</td>
</tr>
<tr>
<td>⌘C</td>
<td>Copy line (empty selection)</td>
</tr>
<tr>
<td>⌘↑ / ⌘↓</td>
<td>Move line down/up</td>
</tr>
<tr>
<td>⌘↑ / ⌘↓</td>
<td>Copy line down/up</td>
</tr>
<tr>
<td>⌘K</td>
<td>Delete line</td>
</tr>
<tr>
<td>⌘Enter / ⌘Enter</td>
<td>Insert line below/above</td>
</tr>
<tr>
<td>⌘\</td>
<td>Jump to matching bracket</td>
</tr>
<tr>
<td>⌘[ / ⌘]</td>
<td>Indent/outdent line</td>
</tr>
<tr>
<td>Home / End</td>
<td>Go to beginning/end of line</td>
</tr>
<tr>
<td>↑ / ↓</td>
<td>Go to beginning/end of file</td>
</tr>
<tr>
<td>⌘PgUp / ⌘PgDn</td>
<td>Scroll line up/down</td>
</tr>
<tr>
<td>⌘PgUp / ⌘PgDn</td>
<td>Scroll page up/down</td>
</tr>
<tr>
<td>⌘[ / ⌘]</td>
<td>Fold/unfold region</td>
</tr>
<tr>
<td>⌘K ⌘[ / ⌘K ⌘]</td>
<td>Fold/unfold all subregions</td>
</tr>
</tbody>
</table>

### Search and replace

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⌘F</td>
<td>Find</td>
</tr>
<tr>
<td>~⌘F</td>
<td>Replace</td>
</tr>
<tr>
<td>⌘G / ?⌘G</td>
<td>Find next/previous</td>
</tr>
<tr>
<td>~Enter</td>
<td>Select all occurrences of Find match</td>
</tr>
<tr>
<td>⌘D</td>
<td>Add selection to next Find match</td>
</tr>
<tr>
<td>⌘K ⌘D</td>
<td>Move last selection to next Find match</td>
</tr>
</tbody>
</table>

### Rich languages editing

| ⌃Space | Trigger suggestion                        |
| ⌃⌘Space | Trigger parameter hints                   |
| ⌘F     | Format document                           |
| ⌘K ⌘F  | Format selection                          |
| F12     | Go to Definition                          |
| ~F12    | Peek Definition                           |
| ⌘K F12 | Open Definition to the side               |
| ⌘.     | Quick Fix                                 |
| ⌘F12   | Show References                           |
| F2      | Rename Symbol                             |
| ⌘K ⌘X  | Trim trailing whitespace                   |
| ⌘K M   | Change file language                      |

### Navigation

<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⌘T</td>
<td>Show all Symbols</td>
</tr>
<tr>
<td>⌃G</td>
<td>Go to Line...</td>
</tr>
<tr>
<td>⌘P</td>
<td>Go to File...</td>
</tr>
<tr>
<td>⌘O</td>
<td>Go to Symbol...</td>
</tr>
<tr>
<td>⌘M</td>
<td>Show Problems panel</td>
</tr>
</tbody>
</table>
MY VISUAL STUDIO CODE SETUP

1. Basic setup
2. Extensions
3. How to debug Joomla with VS Code
4. Using snippets in VS Code
BASIC SETUP

• Installed Visual Studio Code.
• Installed FiraCode as font for VS Code.
  • Free monospaced font with programming ligatures
  • https://github.com/tonsky/FiraCode
• Installed Cobalt2 Theme Official color theme.
EXTENSIONS

• VS Code is highly extendable.
• In VSCode: Shift-Cmd-X, Ctrl-Shift-X
• Quick search with install code.
EXTENSIONS

Bracket Pair Colorizer 2

• Allows matching brackets to be identified with colors
• Install code: coenraads.bracket-pair-colorizer-2
EXTENSIONS

Joomla Snippets

• VS Code Joomla snippets and code examples for Joomla 3 & 4 Alpha
• Install code: anibalsanchez.vs-code-joomla-snippets
EXTENSIONS

Markdown Preview Enhanced

• Preview Markdown content
• Install code: shd101wyy.markdown-preview-enhanced
EXTENSIONS

**PHP Debug**

- Debug adapter between VS Code and Xdebug by Derick Rethans
- Install code: felixfbecker.php-debug
EXTENSIONS

**PHP Intelephense**

- PHP code intelligence for VS Code, more advanced than the Intellisense
- See: [https://intelephense.com/](https://intelephense.com/)
- Install code: bmewburn.vscode-intelephense-client
EXTENSIONS

phpfmt – PHP code formatter

• Formats PHP code, so it comes close to Joomla Coding Standard.
• Install code: kokororin.vscode-phpfmt
EXTENSIONS

Prettier – Code formatter

- Formats HTML/CSS/SCSS/JavaScript/
- Install code: esbenp.prettier-vscode
EXTENSIONS

XML Tools

• XML Formatting, XML treeview etcetera.
• Install code: DotJoshJohnson.xml
HOW TO DEBUG PHP CODE

1. Open Joomla code in VS Code
2. Open debug page: Shift-Cmd-D, Ctrl-Shift-D
3. Click create a launch.json file
4. Choose PHP
5. Add breakpoints
6. Start listening for debug with F5
7. Run your code
USING SNIPPETS IN VS CODE

1. Go to command pallette Cmd-Shift-P, Ctrl-Shift-P
2. Type snippet
3. Choose Preferences: configure user snippets
4. Choose:
   • Existing snippets file
   • New Global Snippets File
   • New snippets file for ‘...’
5. Create a new snippet
CREATING A CODE SNIPPET

1. Copy a code block that you want to use as snippet
2. Beware of lines starting with $, escape them with \\
3. Go to https://snippet-generator.app/
4. Paste copied code block in the Your snippet... field
5. Enter Description
6. Enter Tab trigger
7. Copy the snippet code and paste it in snippets file in VS Code
ADDITIONAL TOOLS I USE

• Prepros
  • Compiles files, transpiles JavaScript, optimises images, reloads browsers.
  • Free unlimited trial!
  • Available for Windows, macOS and Linux
  • https://prepros.io/
**ADDITIONAL TOOLS I USE**

- **Dash / Zeal**
  - API Documentation browser
  - [https://kapeli.com/dash](https://kapeli.com/dash)
  - Windows variant: Zeal
  - Zeal uses docsets provided by Dash.
  - [https://zealdocs.org/](https://zealdocs.org/)

- Both Dash and Zeal integrate nicely with VS Code. Select a codeword and press Ctrl + h.
MY VSCODE SETTINGS & SLIDES

renekreijveld.nl/vscode
renekreijveld.nl/slides/juglondon/vscode.pdf
QUESTIONS?