



MODULESTUDIO

MOST 0.5 - Results and outlook

What is ModuleStudio?

- ModuleStudio is an IDE for creating Zikula applications
 - Describe functional aspects in a long-living model
 - Create code and other artefacts
- Main benefits
 - More speed and more productivity in less time
 - Maintainability: regenerate code for new versions
 - Conformance: follow all APIs and guidelines automatically

What has happened?



- 2009 – ModuleStudio development was slow
 - Client projects and other internal stuff
 - ModuleStudio created the base for about 60 custom modules

- 2010 – MOST is active again
 - More time available as many other activities are completed
 - Primary internal project at the moment (thus less core input)

- ModuleStudio 0.5 is there
- based on Eclipse 3.6 Helios (released 23th of June 2010)

MOST 0.5 - New branding



- Introduced new branding for all editions
- Defines a professional corporate design
 - Font and Logos
 - Splash and About screens
 - Website templates
 - Installer
 - ...
- Overhauled the website



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MOST 0.5 - Automation



- Big goal for 0.5 was to
 - Reduce effort for maintaining dependencies
 - Reduce effort for building releases
- Thus there was a focus on
 - Making builds more stable
 - Making builds more convenient
 - Doing further automation for delivery tasks

MOST 0.5 - Builds

- Continuous Integration server
 - Runs different builds
 - Performs tests
 - Helps with saving time for daily tasks
- Cross-platform builds
 - A common repository stores all data
 - Less effort, better testing
- Big steps for easier releases in future !

Builds: CI-Server



All Dashboard Only test runs Sectioned View +

S	W	Job ↓	Letzter Erfolg	Letzter Fehlschlag	Letzte Dauer
		MOST CE Build Product Cross Platform	Unbekannt	1 Monat 17 Tage (#8)	3 Minuten 13 Sekunden
		MOST CE Build Product Linux Only	4 Monate 4 Tage (#112)	27 Tage (#138)	42 Minuten
		MOST CE Installer	49 Minuten (#8)	Unbekannt	9.5 Sekunden
		MOST CE Test Analysis	Unbekannt	Unbekannt	Unbekannt
		MOST CE Test Suites	Unbekannt	Unbekannt	Unbekannt
		MOST Composite Repository	1 Tag 4 Stunden (#10)	3 Tage 19 Stunden (#4)	1 Minute 3 Sekunden
		MOST Generate Modeling Components	34 Minuten (#204)	Unbekannt	2 Minuten 54 Sekunden
		MOST P2 Update Site	1 Monat 11 Tage (#114)	14 Tage (#169)	14 Minuten
		MOST Target Platform	15 Tage (#5)	Unbekannt	2 Minuten 56 Sekunden
		MOST TranslationPack	39 Minuten (#12)	52 Minuten (#7)	2.9 Sekunden

MOST 0.5 - Installer



- Remote deployment from package
 - Remote access to data repositories
 - Native OS integration
 - Uninstaller
- Advantages
 - Uses different mirrors
 - Continues aborted installations
 - Single source for all platforms
- Advanced features
 - Save install log for automatic execution (e.g. on another machine)
 - Headless usage (console mode)



- Another big goal for 0.5 was to
 - Cleanup responsibilities between MOST and Zikula
 - Find connection and collaboration points
 - Get other people into the project
- Therefore we achieved several things
 - Display of rss feeds on welcome page „web resources“
 - CoZi project with bugtracker
 - Generator outsourcing
 - Multiple generators

Community: RSS feeds



A screenshot of the ModuleStudio 0.5.0 application window. The window title is "ModuleStudio 0.5.0" and it has a menu bar with "File", "Edit", "Search", "Run", "Window", and "Help". The main content area is divided into several sections. On the left, there are two sections: "ModuleStudio homepage" and "Showcase site", each with a small icon and a paragraph of text. Below these is a section titled "MOST community threads" containing a list of ten links, each preceded by a right-pointing arrow. Underneath is a "Subscribe" section. At the bottom left is a "Generator project" section with an icon and text. On the right side, there is a "Zikula community threads" section with a list of ten links, each preceded by a right-pointing arrow. Below this is another "Subscribe" section. At the bottom right is a "Zikula extension database" section with a list of three links, each preceded by a right-pointing arrow. The browser address bar shows "Welcome" and various navigation icons. The right edge of the window shows a vertical scrollbar and a partial view of a sidebar with some text.

Community: RSS feeds



The screenshot shows the ModuleStudio 0.5.0 web browser interface. The browser window has a title bar with the text "ModuleStudio 0.5.0" and standard window controls. The address bar shows "Welcome". The main content area is divided into several sections:

- Weitere Ressourcen im Web**: A section with two links: "ModuleStudio Homepage" and "Showcase Seite".
- MOST Community**: A list of links to various community discussions, including "most-dev group", "Error while loading ModuleStudio", "Aktuelle Version lässt sich nicht ausführen - die alte geht", "Download startet nicht", "Must be getting real close now :: Muss jetzt immer ganz nah :)", "pnaccountapi", "are you planning a zikula 1.2 version ?", "Download defekt?", "AutoBugs funktioniert nicht.", and "Berechtigungen".
- Subscribe**: A link to subscribe to the MOST Community RSS feed.
- Zikula deutsche Community**: A list of links to German Zikula community discussions, including "DIY Wiki Modul?", "Pager erzwingen?", "Mit Eclipse vom Github ?", "Denkfehler in Fallunterscheidung", "Photoshare-Links in Mediashare-Links umwandeln", "[gelöst] Pagemaster Fehler: Exit handler:Action: approve not available in this State: approved", "[gelöst] Pagemaster unterschiedliche Templates für ein Publikationstyp", "Kategorien wie gehts", "Pagemaster Relations - war: Zeichensatzproblem beim Umstieg 1.1.1 > 1.2.3 und Pagesetter", and "pnForm auch Button mit Grafik".
- Subscribe**: A link to subscribe to the Zikula deutsche Community RSS feed.
- Zikula internationale Community**: A list of links to international Zikula community discussions, including "Dizkus cannot add urls", "PostCalendar 6.2 RC1 and 7.0 RC1 available for testing", "ShareThis 2.0 RC1 available for testing", "SEO - meta description", "Ideas on related articles in News...", "Finally Getting Around To Upgrading My Site", "Admailer installation issue resulted in very high server load on VPS", "Convert Module to Gettext incl. languages", "Banners 3.0.0 RC1 available for testing", and "the folders under pntemp do not stop to increase of size".

- Goals
 - Zikula devs should be able to contribute
 - Decrease dependency from ModuleStudio to Guite
- Separation between MOST tooling and transformations
 - ModuleStudio lies still in a private repository
 - CoZi project for the code generator
 - The builds read them back from there
 - There is also the bugtracker
- Project page: <http://code.zikula.org/generator>

- Support for multiple generators
- Idea: create different artifacts from a given model
- Currently there are four „cartridges“ in development
 - zClassic creates a classic Zikula module
 - z00 creates a z00 application (for future)
 - documentation generates documentation resources
 - reporting visualises measurements and metrics
- More cartridges planned
 - Different versions (e.g. zclassic for Zikula 1.2 and 1.3)

Generator: zclassic

- Creates a classic Zikula module
- Fixed many errors and minor issues
- Updated to full Zikula 1.3.0 compliance
 - Controller methods, Zikula_View usage, CSS classes, etc.
 - Using all essential core technologies
 - Support for Doctrine

- Generator enhancements
- Profiler
 - For tracking performance problems
- Precompiler
 - Not used yet, but prepared for future. Useful for complex models.
- Php beautifier (source code formatter)
 - Following Zikula coding standards

MOST 0.5 - Other changes



- Simpler language elements (common MVC terms)
- Prepared full support for Doctrine in the data layer
 - columns, relationships, validators, behaviors, event listeners
- Automatic creation of initial containers
- Versioning support with automatic model migration
 - Reduce trouble caused by language changes

- Ongoing „sub projects“
 - Internationalization
 - Academic research and activities
- Outlook to future

- Iterative process
 - Different types of resources to handle
 - Needs a few versions
- Already many translators (thanks!)
 - Catalan, Croatia, Dutch, French, German, Greek, Polish, Portuguese, Spain
 - maybe also Italian and Russia
- First goal
 - 0.5 – start process
 - 0.6 – get convenient translations inside MOST itself working
 - 0.7 – achieve first complete results for some locales

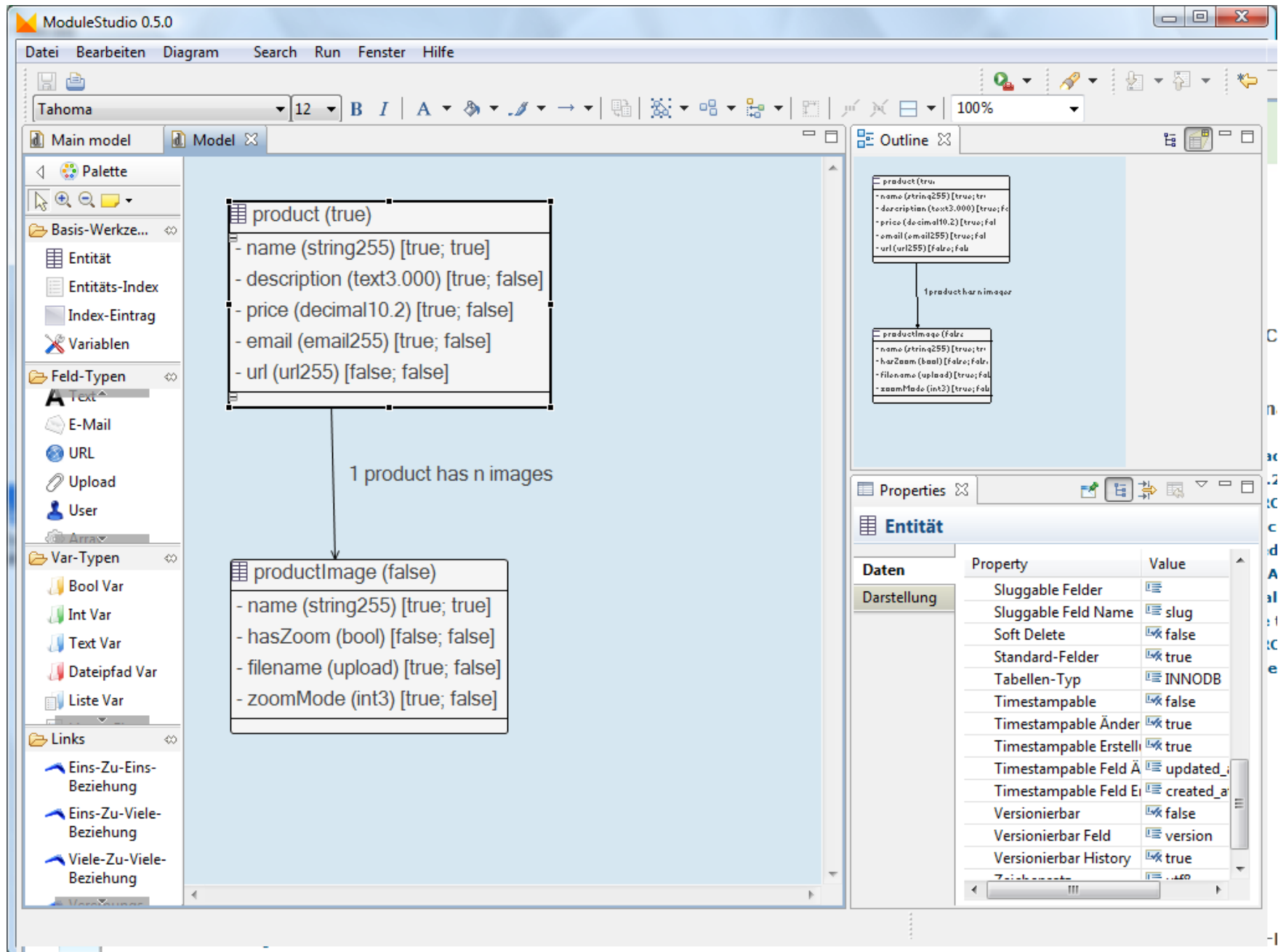
Locales: English



The screenshot shows the ModuleStudio 0.5.0 interface. The main workspace displays a class diagram with two entities: 'product (true)' and 'productImage (false)'. The 'product' entity has properties: name (string255) [true; true], description (text3,000) [true; false], price (decimal10.2) [true; false], email (email255) [true; false], and url (url255) [false; false]. The 'productImage' entity has properties: name (string255) [true; true], hasZoom (bool) [false; false], filename (upload) [true; false], and zoomMode (int3) [true; false]. A relationship line connects them with the text '1 product has n images'. The left sidebar contains a 'Palette' with 'Main tools' (Entity, Entity Index, Entity Index Item, Variables), 'Field types' (Text, Email, Url, Upload, User), 'Var Types' (Bool Var, Int Var, Text Var, File Path Var, List Var), and 'Links' (OneToOne Relationship, OneToMany Relationship, ManyToMany Relationship). The right sidebar shows an 'Outline' of the diagram and a 'Properties' panel for the selected 'Entity'.

Property	Value
Sluggable Fields	
Sluggable Unique	<input checked="" type="checkbox"/> true
Soft Delete	<input checked="" type="checkbox"/> false
Standard Fields	<input checked="" type="checkbox"/> true
Table Type	<input type="checkbox"/> INNODB
Timestampable	<input checked="" type="checkbox"/> false
Timestampable	<input checked="" type="checkbox"/> true
Timestampable	<input checked="" type="checkbox"/> true
Timestampable	<input type="checkbox"/> created_at
Timestampable	<input type="checkbox"/> updated_at
Versionable	<input checked="" type="checkbox"/> false
Versionable Field	<input type="checkbox"/> version
Versionable History	<input checked="" type="checkbox"/> true

Locales: German



The screenshot shows the ModuleStudio 0.5.0 interface. The main workspace displays a UML class diagram with two classes: 'product (true)' and 'productImage (false)'. The 'product' class has attributes: name (string255) [true; true], description (text3.000) [true; false], price (decimal10.2) [true; false], email (email255) [true; false], and url (url255) [false; false]. The 'productImage' class has attributes: name (string255) [true; true], hasZoom (bool) [false; false], filename (upload) [true; false], and zoomMode (int3) [true; false]. A relationship line connects the two classes with the label '1 product has n images'.

The left sidebar contains a 'Palette' with categories: 'Basis-Werkze...', 'Feld-Typen', 'Var-Typen', and 'Links'. The 'Feld-Typen' category is expanded, showing options like Text, E-Mail, URL, Upload, and User. The 'Var-Typen' category shows Bool Var, Int Var, Text Var, Dateipfad Var, and Liste Var. The 'Links' category shows relationship types like Eins-Zu-Eins-Beziehung, Eins-Zu-Viele-Beziehung, and Viele-Zu-Viele-Beziehung.

The right sidebar contains an 'Outline' window showing a tree view of the classes and their relationship. Below it is a 'Properties' window for the selected 'Entität' (Entity). The 'Properties' window has a table with columns 'Property' and 'Value'.

Daten	Property	Value
Darstellung	Sluggable Felder	<input type="checkbox"/>
	Sluggable Feld Name	<input type="checkbox"/> slug
	Soft Delete	<input checked="" type="checkbox"/> false
	Standard-Felder	<input checked="" type="checkbox"/> true
	Tabellen-Typ	<input type="checkbox"/> INNODB
	Timestampable	<input checked="" type="checkbox"/> false
	Timestampable Änder	<input checked="" type="checkbox"/> true
	Timestampable Erstell	<input checked="" type="checkbox"/> true
	Timestampable Feld Ä	<input type="checkbox"/> updated_
	Timestampable Feld E	<input type="checkbox"/> created_a
	Versionierbar	<input checked="" type="checkbox"/> false
Versionierbar Feld	<input type="checkbox"/> version	
Versionierbar History	<input checked="" type="checkbox"/> true	

- MOST is actively involved in research
 - Important for prototyping and investigating certain topics
- Project of Gabriel Freinbichler
 - Design of generator cartridges documentation and reporting
- Project of 4 to 5 students at my former university
 - Topic: „Controller and View with ajax and event-driven modeling“
 - Starting in October 2010
 - Subsequent projects possible



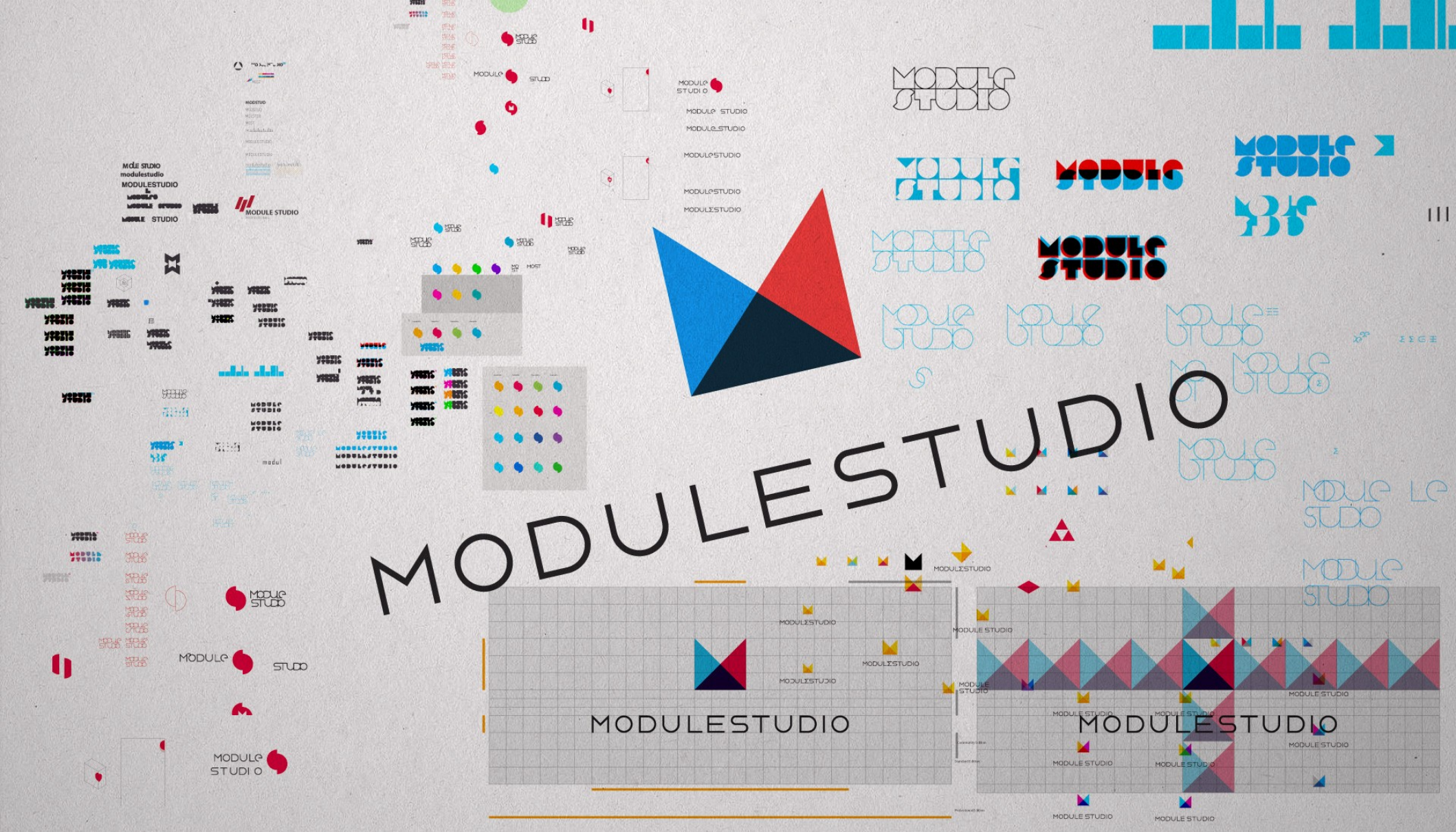
Outlook: 0.5 series

- 0.5.1
 - Bugfixing
 - Bugfixing
- 0.5.2
 - More Bugfixing
 - Documentation
 - Cheatsheets
 - Some promotion

Outlook: 0.6

- Start with automated testing
- Distributed shared model repository
 - exchange and reuse models
 - team modeling
 - work offline and sync later
- Stability of release engineering and deployment
 - Getting updates out regularly (generator is essential)
 - Allow focus on the actual application

- ModuleStudio development is active again
 - Stable base for future releases (builds, installer, etc.)
 - Opened project for Zikula
 - More people involved
 - Several interesting subprojects
- 0.5 release ready to download
 - Happy testing :-)



Questions?

- Homepage (user forums)
- Demo page (examples)
- CoZi project (bug tracker)
- most-dev group (testers and translators)

<http://modulestudio.de/>

<http://demo.modulestudio.de/>

<https://code.zikula.org/generator/>

<http://groups.google.de/group/most-dev>