

Understanding content types

Piranha allows a developer to define three categories of **content type**, as shown in the following list:

- **Sites:** For properties shared across all other content. If you don't need to share properties, then you don't need a site content type. Even if you do need one, each site usually only needs one site content type. The class must be decorated with `[SiteType]`. The `piranha.mvc` project template does not include an example of a custom site.



More Information: You can read about sites at the following link:
<https://piranhacms.org/docs/content/sites>

- **Pages:** For informational pages like **Contact Us** and landing pages like a home or category page that can have other pages as their children. Pages form a hierarchical tree that provides the URL path structure of the site, like `/contact-us/our-location` and `/about-us/job-vacancies`. Each site usually has multiple page content types, like **Standard page**, **Standard archive**, **Category page**, and **Product page**. The class must be decorated with `[PageType]`.
- **Posts:** For "pages" that do not have children and can only be listed in a page with an archive property. Posts can be filtered and grouped by date, category, and tags. The `PostArchive<T>` type provides the user interaction with the posts through a page property named **Archive** by convention. Each site usually has only one or two post content types, like `NewsPost` or `EventPost`. The class must be decorated with `[PostType]`.

Understanding component types

Registered content types are given built-in support for creating, editing, and deleting in the Piranha manager. The structure of a content type is provided by dividing it into three categories of **component type**, as shown in the following list:

- **Fields:** The smallest component of content. They can be as simple as a number, date, or string value. Fields are like properties in a C# class. The property must be decorated with `[Field]`.
- **Regions:** Small pieces of content that appear in a fixed location on the page or post rendered to the visitor under the control of the developer. Regions are composed of one or more fields, or a sortable collection of fields. Regions are like titled complex properties in a C# class. The property must be decorated with `[Region]`.
- **Blocks:** Small pieces of content that can be added, reordered, and deleted. Blocks provide complete flexibility to the content editor. By default, all pages and posts can contain any number of blocks, although this can be disabled for a specific page or post content type with the `[PageType]` attribute that sets `UseBlocks` to `false`. Standard block types include multi-column rich text, quote, and image. Developers can define custom block types with a custom editing experience in the Piranha manager.

Understanding standard fields

Standard fields each have a built-in editing experience and include the following:

- `CheckBoxField`, `DateField`, `NumberField`, `StringField`, `TextField`: Simple field values.
- `PageField` and `PostField`: Reference a page or post using its GUID.
- `DocumentField`, `ImageField`, `VideoField`, `MediaField`: Reference a document, image, video, or any media file using its Guid. By default, `DocumentField` can be `.pdf`, `ImageField` can be `.jpg`, `.jpeg`, or `.png`, `VideoField` can be `.mp4`, and `MediaField` can be any file type.
- `HtmlField`, `MarkdownField`: Formatted text values with a customizable TinyMCE editor with a toolbar and a Markdown editor.

Customizing the rich text editor

By default, Piranha CMS includes the open source TinyMCE rich text editor.



More Information: You can read the documentation for TinyMCE at the following link: <https://www.tiny.cloud/docs/>

TinyMCE is configured using the file named `editorconfig.json`, as shown in the following markup:

```
{
  "plugins": "autoresize autolink code hr paste lists piranhalink piranhaimage",
  "toolbar": "bold italic | bullist numlist hr | alignleft aligncenter alignright | formatselect styleselect | piranhalink piranhaimage",
  "blockformats": "Paragraph=p;Header 1=h1;Header 2=h2;Header 3=h3;Header 4=h4;Code=pre;Quote=blockquote",
  "styleformats": [
    { "title": "Small", "tag": "small", "type": "inline" },
    { "title": "Code", "tag": "code", "type": "format" },
    { "title": "Lead", "tag": "p", "type": "block", "classes": "lead" },
    { "title": "Button Primary", "tag": "a", "type": "inline", "classes": "btn btn-primary" },
    { "title": "Button Light", "tag": "a", "type": "inline", "classes": "btn btn-light" }
  ]
}
```

Piranha CMS provides two custom TinyMCE plugins to enable integrated embedded links and images.