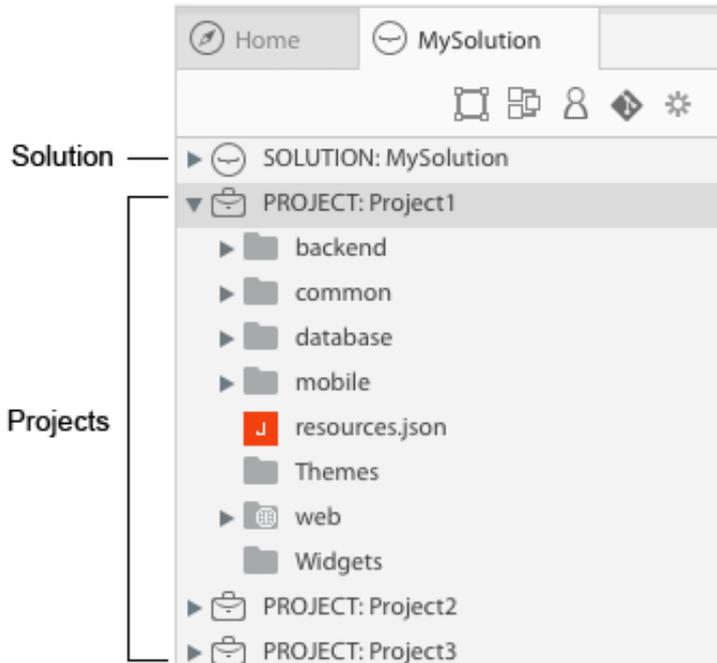# Solution Explorer

The **Solution Explorer** allows you to view your solution, its projects, and the files contained in each project:

You can double-click a folder to either collapse or expand it, thus showing or hiding its contents. Double-clicking on all other files opens the files using the appropriate editor in a new tab. Wakanda opens the **Data Model Editor** for a model, the **Prototyper** for Page Prototypes, the **JavaScript Editor** for files of type JSON, XML, JavaScript, and Text, or the **HTML/CSS Editor** for files of type HTML and CSS. If you double-click on an image file, it is displayed in a new tab.

A Web application is a project that you have published to the Web. There are two elements that make up a Web application:

- **Solution**: The solution contains the directory, SSL certificates, and settings for all of its projects
- **Project**: Each project has its own datastore model, permissions, settings, as well as mobile and prototype folders containing the elements for the Web application.
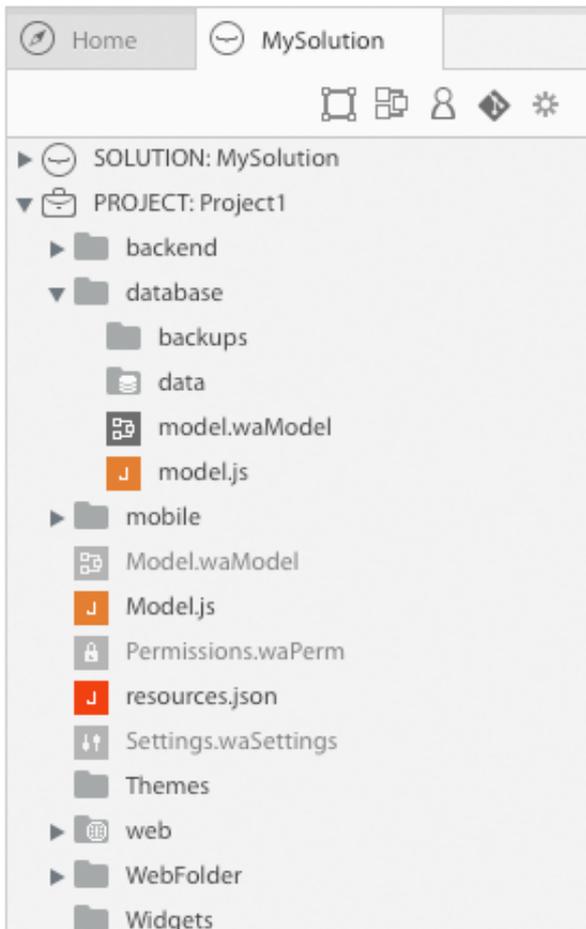
Buttons

In the Solution Explorer, you have the following buttons to access the different parts of your solution or project:

Button	Description
⬚	Opens the current project's home page at web/prototype/index.waPage. If that file does not exist, it will open the web/index.html page.
⊞	Opens the current project's model in the **Data Model Editor**.
👤	Opens the solution's **Directory**.
◈	Opens the Git repository tab. For more information, refer to **Creating a Git repository**.
✳	Allows you to define two settings for the Solution Explorer. See **Settings menu** below.

Settings menu

In the **Settings** menu, you can define the following options:

- **Folders on Top**: Display at the top and then files in the list.
- **Hide Wakanda File Extensions**: Hide the extensions for the Solution's directory and settings files as well as the Project's model, permissions and settings files. If you show the extensions, they appear as shown below:

If you select this option, the extension is also hidden in the tab title.

Contextual menus in the Solution Explorer

In the Solution Explorer, a contextual menu appears for each file and folder depending on its function. Here are a few of the standard options available for most files and folders:

- **New**: This option allows you to create a new Page Prototype, Page Component, HTML File, CSS File, JS File, JS Module, file (of any type), or folder.
- **Rename**: Rename the file or folder. Be careful when renaming a Page because none of its associated files (JS or CSS) are renamed and its "package.json" file is not modified either.
- **Move to Trash**: Remove the files and/or folders from the project/solution and place them in your computer's trash.
- **Open Enclosing Folder**: Opens the file or folder in its enclosing folder on your computer.

Solution

Here are the specific options available for the **Solution**:

- **Close Solution**: Closes the selected solution. This same option is also available from the solution's contextual menu.
- **Open this Solution at Startup**: Opens the selected solution at startup by default when you launch Wakanda. This same option is also available from the solution's contextual

menu.

- **Select Wakanda Server Location**: Define which remote server to open for a particular solution.
- **New**: Add a new project, file, or folder to the solution.
- **Add an Existing Project to Solution**: This menu allows you to add an existing project to your current solution. The project must be a valid Wakanda project and the file must have the ".waProject" extension. Only the reference to the project is added to the solution; the files are not copied or moved. To remove the project's reference in your solution, use the **Remove from Solution** option.

Project

Here are the specific options available for the **Project**:

- **New**: This menu allows you to create a new Page Prototype, Page Component, JS File, JS Module, Data Folder, File, and Folder.
- **Import**: This menu allows you to import a file or folder into your current project by copying it directly into the location you choose (for example, in your project or in one of your project's folders).
- **Remove from Solution**: Removes the selected project from the solution without touching the files it contains.
- **Connect to Remote Datastore**: (Wakanda Enterprise only) Connect to a remote datastore. For more information, refer to **Remote Datastore**.

Folders

Here are the specific options for **Folders**:

- **Import**: This menu allows you to import a file or folder into your current project by copying it directly into the location you choose (for example, in your project or in one of your project's folders).
- **Set as Active Web Folder:** Set folder as the project's active Web Folder.
- **Set as Active Data Folder:** Set folder as the project's active Data Folder.

Files

Here are the specific options for all files:

- **Open in New Window**: Opens the selected file in a new window. Depending on the file type, the appropriate editor opens: the Data Model Editor for a model, the Prototype for Page Prototypes, or the Code Editor for files of type JavaScript, JSON, HTML, CSS, XML, and Text. Images are displayed directly in the Workspace.
- **Open in New Tab**: Opens the selected file in a new tab in its appropriate editor. By default, when you double-click a file, it is opened in a new tab in Wakanda Studio.

For JavaScript files, you also have the following options:

- **Set as Active Bootstrap:** Set the JavaScript file as the active Bootstrap file.

For a .waModel file, you have the following option:

- **Set as Active Model:** Set the selected model as the active one for your project.

For a .waSettings file, you have this option:

- **Set as Active Settings:** Set the file as the active settings file for your project.

Themes Folder

The Theme folder in each project's folder contains the custom themes installed for your project. Its contextual menu has the following options:

- **Open Enclosing Folder**: Open your project's Themes folder in a new window on your computer.
- **Import Widgets**: Open the **Add-ons** so that you can install or import a theme either into your project's Themes folder or into the Favorites folder.
- **Open Favorites**: The Favorites folder contains the themes that are copied to each new project you create. You can install them into your Favorites folder by using the **Add-ons**. Your Favorites folder is in the following location (depending on your operating system):
  On Macintosh: /Users/*userName*/Documents/Wakanda/Themes/
  On Windows: *diskName*:\Users*userName*\Documents\Wakanda\Themes\
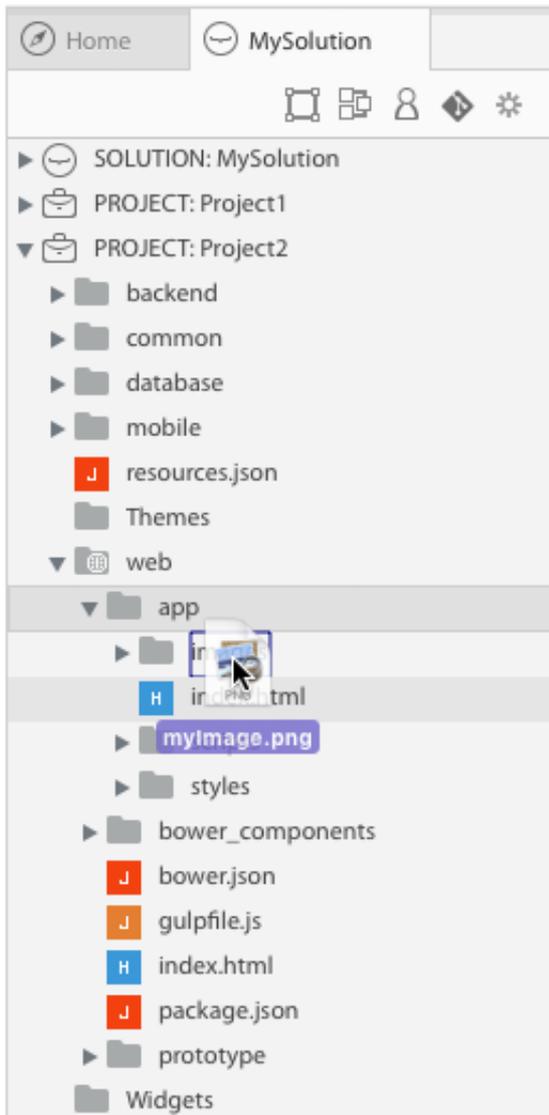
Widgets Folder

The Widgets folder in each project's folder contains the custom widgets installed for your project. Its contextual menu has the following options:

- **New Custom Widget**: Create a new custom widget in the project. For more information, refer to **Creating a Custom Widget**.
- **Open Enclosing Folder**: Open your project's Widgets folder in a new window on your computer.
- **Import Widgets**: Open the **Add-ons** so that you can install or import a widget either into your project's Widgets folder or into the Favorites folder.
- **Open Favorites**: The Favorites folder contains the widgets that are copied to each new project you create. You can install them into your Favorites folder using the **Add-ons**. Your Favorites folder is in the following location (depending on your operating system):
  On Macintosh: /Users/*userName*/Documents/Wakanda/Widgets/
  On Windows: *diskName*:\Users*userName*\Documents\Wakanda\Widgets\

Importing files and folders

You can import files and folders into your project either by selecting **Import->File** or **Import->Folder** from the project's contextual menu. You can also select **Import File** or **Import Folder** from the **File** menu. In both cases, the imported file or folder is copied into the currently selected folder or project.

You can also import files or folders by dragging and dropping them from your hard disk to the Solution Explorer where you want them to be added.
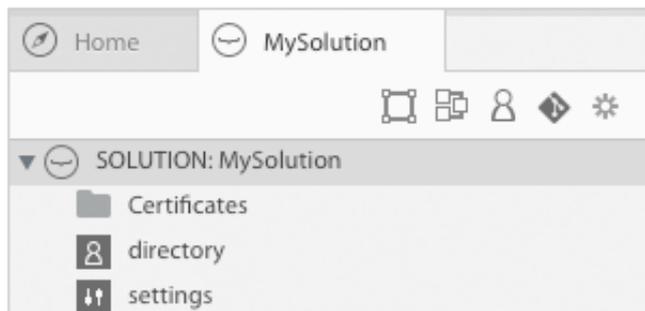
Solution

A Wakanda solution contains one or more projects. In Wakanda Studio, you can open only one solution at a time; however, when you start a solution with Wakanda Server, all the projects will be published. Because each project has its own port, you can access all the projects in a solution simultaneously.

To find out how to create a new solution, open an existing one, or close a solution, refer to the chapter in the **User Guide** manual.

For more information about the file structure and architecture for a solution, refer to the **Solution** chapter in the **Architecture of Wakanda Applications** manual.

Structure of a solution

The default structure for a new solution is as follows:

For each solution, the files listed below are created automatically:

- **Certificates**: This folder is where you can put your SSL/TLS certificates for your solution.
- **Directory**: The solution's directory file (whose file extension is ".waDirectory") containing the users and groups for your solution. To edit it, you can either double-click on it or click on the **Directory** button in the Explorer toolbar. For more information, please refer to the **Directory** chapter.
- **Settings**: This file (whose file extension is ".waSettings") is where your solution's settings are defined. The settings file is an XML file that contains the settings for your solution. For more information, please refer to **Solution Settings**.

Projects in a solution

Each solution can have one or more projects in it. To add a project to a solution, you can:

- Add a project automatically (with the same name as the solution) when you create a new solution,
- Create a new project in the solution, or
- Add an existing project to the solution.

For more information projects, refer to the **Project** chapter.
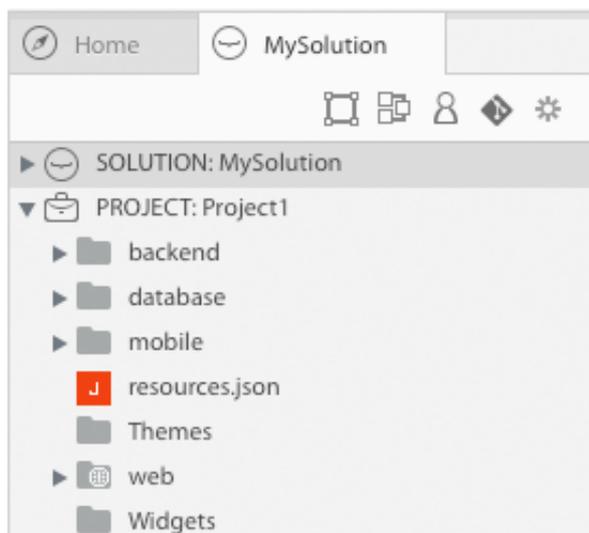
Project

A Wakanda **Project** in Wakanda contains everything you need to:

- create your project's data model,
- define the users and groups for your project,
- build a prototype,
- create a mobile application, and
- create a desktop application.

For more information about the file structure and architecture for a Project, refer to the **Project** chapter in the **Architecture of Wakanda Applications** manual.

Structure of a Wakanda project

Here is the structure of a Wakanda project:

The files and folders in the project are the following:

- **backend**: This folder contains both the permissions and settings.
- **database**: In this folder, you will find the datafolder and your project's model.
- **mobile**: This folder contains all the files necessary for your mobile application.
- **resources.json**:This file defines the path to your common folder.
- **Themes**: Folder containing your prototype's custom themes.
- **web**: This folder contains all the files necessary for your desktop web application and prototype.
- **Widgets**: Folder containing your prototype's custom widgets

Backend

In this folder are placed the following items:

- **modules**: All the JS modules for your project.
- **permissions**: The permissions for your project.
- **settings**: Your project settings.

Database

In this folder, you have the following files and folders:

- **backups**: This folder contains the backups that Wakanda creates.
- **data**: The data files will be placed in this folder by Wakanda automatically.

- **model**: This file is the actual model for your project.

If you want to create your model using the API, you can create the "model.js" file and place it in this folder.

Mobile

The **mobile** folder is where you will put all the files relating to your mobile application:

- **bower.json**: This file defines the Bower dependencies.
- **config.xml**: This file describes the Cordova configuration.
- **gulpfile.js**: This JS file contains the Gulp tasks.
- **hooks**: Custom Cordova hooks to execute on specific commands.
- **ionic.project**: Ionic configuration file.
- **package.json**: Note dependencies.
- **platforms**: iOS/Android-specific builds are located here.
- **www**: This folder contains all the files necessary for the application. By default, the files for a sample application are included in a new project.
    - **common**: Folder containing files that are common to your desktop and mobile application.
    - **css**: Folder containing the mobile application's CSS files.
    - **img**: All the images for the mobile application can be placed here.
    - **index.html**: Main HTML page for your mobile application.
    - **js**: Folder containing the mobile application's JS files. By default, there are three files: app.js, controllers.js, and services.js.
    - **lib**: Contains the folders for the mobile application's libraries.
        - **ionic**: A folder contains the version.json file (which indicates the version of ionic) and also the following folders: css (ionic CSS files), fonts (Web fonts), js (JS files), and scss (Sassy CSS files).
    - **templates**: Other HTML files for your mobile application.

Themes

The Themes folder contains the custom themes for your page prototype.

All your favorite themes and widgets will be placed inside the appropriate folder by default. For information about creating favorite themes and custom widgets, refer to **Defining custom themes as favorites**.

You can also install custom themes and widgets into your project by using the **Add-ons** extension. The installed themes will be placed in this folder.

Web

The web folder contains multiple folders and files for both your Web application and your prototype:

- **app**: The Wakanda-Angular application can be developed here.
    - images: Images folder for your app.
    - index.html: Web app's main HTML file for your app.
    - scripts: Folder containing the app's JS files.
    - styles: Folder containing the app's CSS files
    - views: Folder for the views of your app.
- **bower_components**: The Bower components for the Wakanda-Angular application.
    - angular: Folder containing AngularJS files.
    - angular-wakanda: Folder containing Angular-Wakanda connector.
    - bootstrap-css: Folder containing bootstrap CSS files.
- **bower.json**: This file defines the Bower dependencies.

- **gulpfile.js:**This file contains the Gulp tasks.
- **index.html**: HTML page that redirects to the app/index.html page.
- **package.json**: JSON file that defines the dependencies of your Wakanda-Angular application.
- **prototype**: The folder contains your application's prototype.
    - index.waPage: Default page prototype.

Widgets

The Widgets folder contains the custom widgets that you can add on your Page prototypes.

All your favorite widgets will be placed inside the appropriate folder by default. For information about creating custom widgets, refer to **Defining custom widgets as favorites**.

You can also install custom widgets into your project by using the **Add-ons** extension. The installed widgets will be placed in this folder.