CREATE YOUR INTERFACE



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Design the interface of your app



Getting started with your app's interface

In order to determine the look and feel of a Twixl app, we offer the concept of 'grid styles' and 'item styles' to determine how your content is presented to a user/reader.

1. Browse Grids

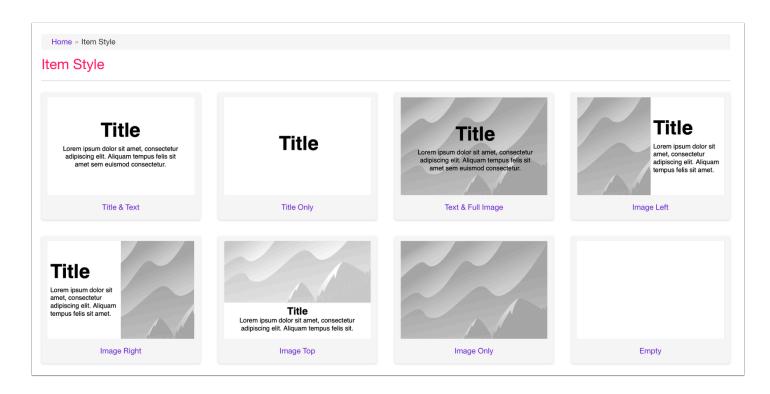
The browse grid style determines how the content of a <u>collection</u> in your app is organized on a 'grid' - each content item can be displayed on that grid using a particular size. Check the screenshot below of a grid that uses 6 columns (a '**grid style**'), and where each item on that grid spans a specified number of columns. Different collections in your app can have different grid styles applied to them. Learn more about <u>Grid Styles</u>.



2. Item Styles

The appearance of the cells on your browse pages can be determined in the Item Style options window. While a 'grid style' applies to a collection, an 'item style' applies to a content item.





As you can see, a couple of examples are:

- · A title and a subtitle for an article
- A title on an image background
- · An image to the left or right of a title & subtitle
- · And many more combinations...

To learn more about this, check this article.

3. Custom Background Images for a collection

In addition to defining a background color for your collection, you can also use an image as the background. Read more about it <u>here</u>.

4. Custom Fonts

Twixl also supports the use of custom fonts in your app. More details can be found in this article.



Styling: Grid Styles

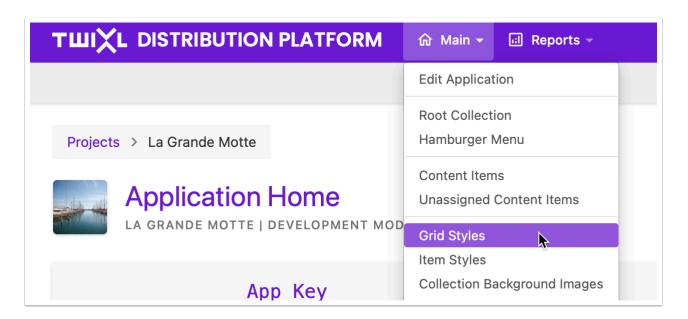
When you envision the appearance of your app and how it presents itself to the user, the 'Grid Style' is one of the first things you should think about. What elements will be used: banners, showcases, collections...? And how should these be defined in a grid structure? It might be helpful to first make a mock-up of the Root Collection (and other collections) design and design this mock-up in a grid of squares. This will be the base of your browse grid definition on the Twixl Platform.

Twixl Publisher apps use a concept we call "Browse Pages" as a flexible way to present your content to readers and the design of these browse pages is defined by the browse grid. While browse pages can still mimic the behaviour of the traditional kiosk that contains different issues, the flexibility goes much further. Note that browse pages can be intended either for scrolling vertically or horizontally.

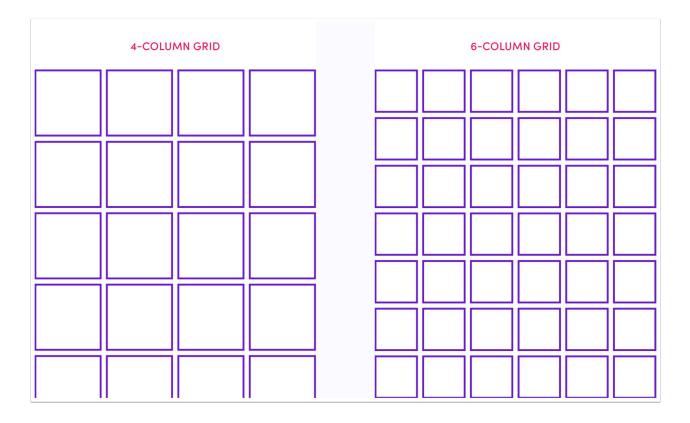
1. Defining the structure of your browser page(s)

The layout of your browse pages will be defined using a grid-based approach. First of all, define a number of columns for your pages. Then, based on that number of columns, your page will be filled with a number of equal squares.

You can insert the number of columns in the 'Grid Style' section on the Twixl Platform. In your app, go to the Main menu and select 'Grid Styles'.



Here are examples of both a 4-column and a 6-column grid with vertical scrolling.



All the items you want to display will have a size of one or more of these squares. Your pages can have different cells as you can see in the example below.



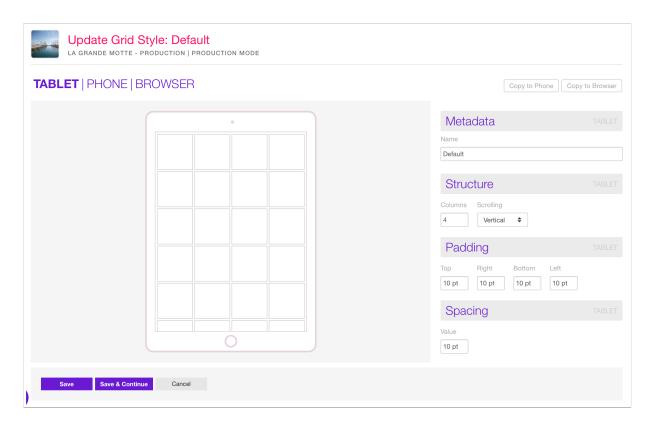
Each of the cells can display a thumbnail that links to an article, or to other content items like an image or a movie (more on 'content items' can be found here). But it can also be a link to a collection of articles (an 'issue' in traditional speak).



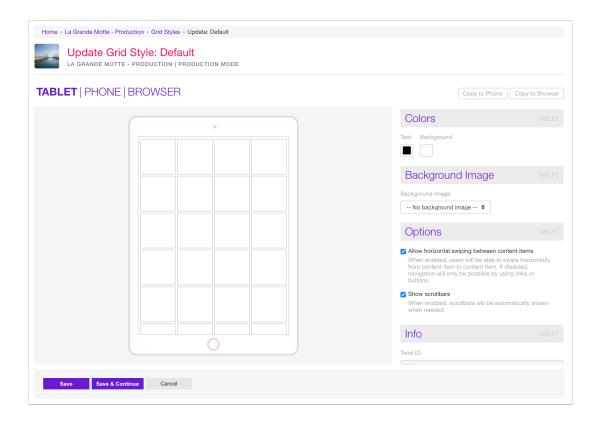
2. Grid Styles

In the "Grid Style" window, you can adjust a number of parameters for a collection, such as the number of columns in your grid and whether scrolling will be horizontal or vertical. You can set different parameters for tablet and phone content.

- **Columns**: determines the size of the squares that will be the basis for the size of the cells you place on your grid
- Scrolling: determines whether scrolling in your browse pages will be horizontal or vertical
- Padding: refers to the number of pixels reserved on the outer sides of the grid
- **Spacing**: refers to the space in between cells on the grid
- Colors: set colors for the background of the grid and the text.
- Background Image: lets you select a background image for the collection more details here.
- **Options**: lets you control the swiping, and choose whether or not scrollbars should always be displayed.







Tablet - Phone - Browser

In 1 Grid Style you can define a different layout for:

- Tablets
- Phones
- Browser: will be used in the Browser Client.

It's entirely up to you whether you want to use separate designs for each rendition or not. You can use the same design as well by using the buttons *Copy to Phone*, *Copy to Tablet* and/or *Copy to Browser*.



ABOUT THE BROWSER CLIENT

The tab Browser Client will only be visible when you activated the Browser Client in your app. See this article for more info about the Browser Client.

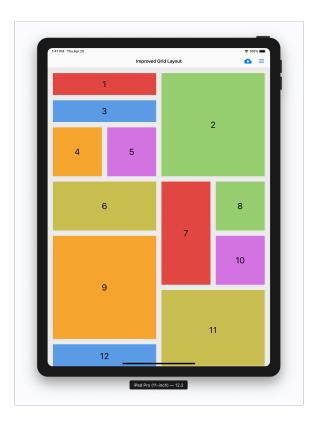


3. How are grid styles rendered?

3.1. Auto-flow fills the gaps

Cells are rendered in an intelligent way:

- · All cells are rendered using an 'auto-flow'.
- Cells that don't fit in one row, will be moved to the next and there it will be evaluated again.



0

NAMING YOUR GRID STYLES

As most apps use several grids for different pages, giving an clear and unique name for each and every grid style is key. This will make your work in a later stadium much easier!

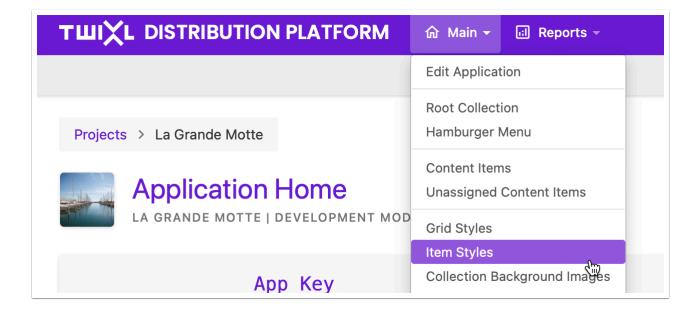


Styling: Item Styles

Previously the design of the different elements in the grid of your app has been defined by the 'Grid Styles' tool. How every cell - or number of cells - in this grid will look like and what will be displayed within this cell, is determined in 'Item Styles'.

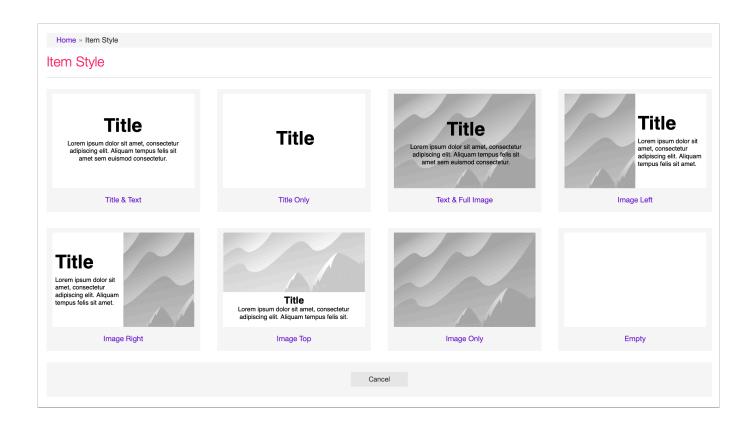
1. Item Styles

Start with your first Item Style by selecting the Item Styles tool from the Main menu for your app on the Twixl Platform.



2. Adding Item Styles

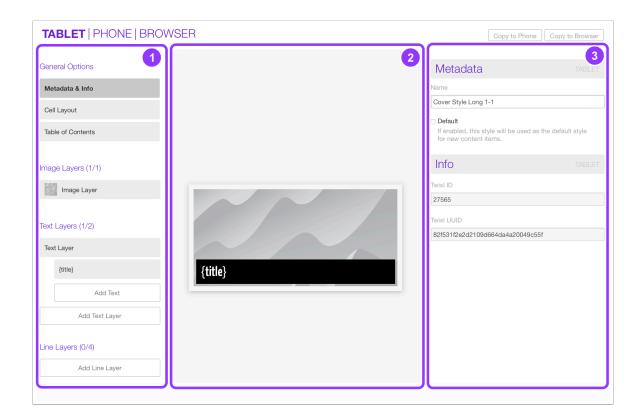
Several templates are available to help you getting started with Item Styles. The most common designs are ready with a simple click. Don't worry if these do not fit your needs exactly, they are fully customizable afterwards.



3. Getting Started

Entering the Item Style interface, you'll notice 3 different sections:

- 1. **General options:** select all the available options that are configurable for an Item Style here.
- 2. **Live Preview Pane:** the Live Preview Pane displays all the design changes you make, instantly.
- 3. **Available parameters per option:** for every General Option (cfr 1.) different parameters will be displayed enabling you to adapt the look and feel of your cell.



4. Available options

Q AVAILABLE METADATA PLACEHOLDER TAGS

If you have entered metadata in your <u>Content Items</u>, you can define here what you want to display in your cell by selecting the available metadata placeholder tags.

These are the available tags (they all correspond to the respective metadata fields in your Content Item):

There are specific tags for specific use cases:

- **{price}:** This tag will pull the price of your in-app purchase item from a store (App Store or Google Play)
- **{purchaseinfo}:** This tag will use the purchase info defined in our Collection or PDF Content Item (for non-free content).
- **{icon-download-status}**: This tag can be used for collections that are marked as monolithic or for longpress downloads and will make it clear to a user whether a collection is ready to download or has already been downloaded.



4.1. Tablet - Phone - Browser

In 1 Item Style you can define a layout for:

- Tablets: This design will be used on Tablets
- Phones: This design will be used on Phones
- Browser: This design will be used in the Browser Client.

You can use separate designs for each rendition or not. It all depends on the content and the requirements. If you want to use the same design on different media, select **Copy to Phone**, **Copy to Tablet** and/or **Copy to Browser**.



ABOUT THE BROWSER CLIENT

The tab Browser Client will only be visible if the Browser Client option has been activated for your app. See this article for more info about the Browser Client.

4.2. General options

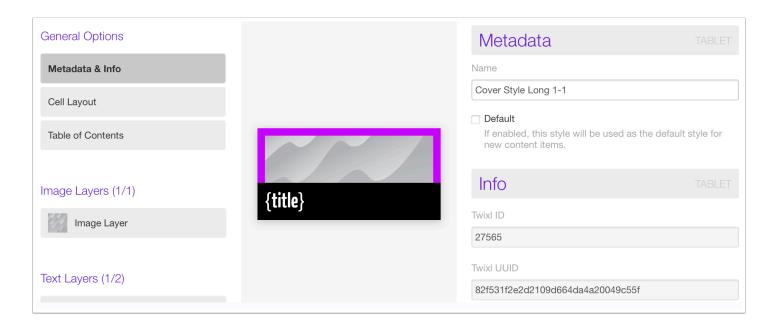
Introduction

- 1. **General options:** Here you can configure general metadata, some basic layout options and the styling of the Table Of Content (TOC).
- 2. Image Layers: you can add an Image Layer with several styling options.
- 3. **Text Layers:** You can add up to **2 Text Layers** and each Text Layer can contain up to **5 Text Lines**. All come with a lot of styling options.
- 4. Line Layers: You can add up to 4 Line Layers, each with their own styling options.

The combination of all these options, allows you to create complex styling options for your cells.

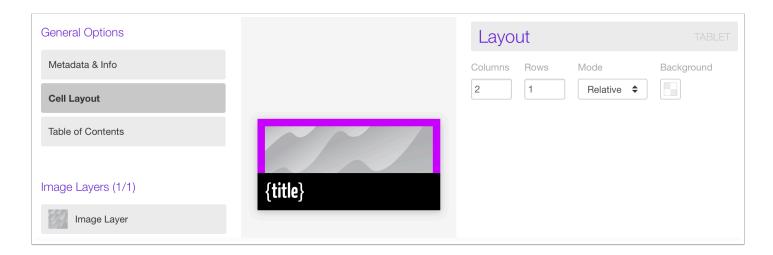


4.2.1. Metadata & Info



- Name: Define a name for this Item Style. Even though this is for internal use only, it is
 important to accord consistent names even in line with the names of the Grid Styles
 in order to make it easier if you have to select the correct item style for your content
 or when you will extend the item style list with new item styles.
- Default: If enabled, this style will be used as the default style for new content items.
- Twixl ID & Twixl UUID: If you experience any issues and need support, it's always a
 good idea to mention this info in a Support Ticket.

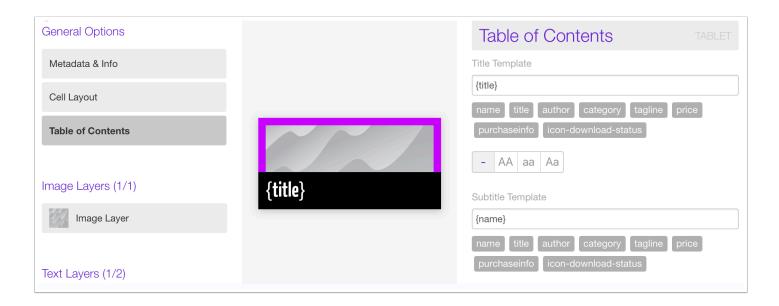
4.2.2. Cell Layout



The layout defines the number of columns and rows that a cell will span. The effective size of your cell will depend on the number of columns you defined for your <u>Grid Styles</u>.



4.2.3. Table of Contents



This section determines the design of your table of content.

- Title & Subtitle Template: Select from different placeholders to show a title and optional subtitle. If these textlines are fixed, you can also enter your own title and subtitle.
- Change case: Allows you to change the case of title and subtitle.



4.2.4. Image Layers

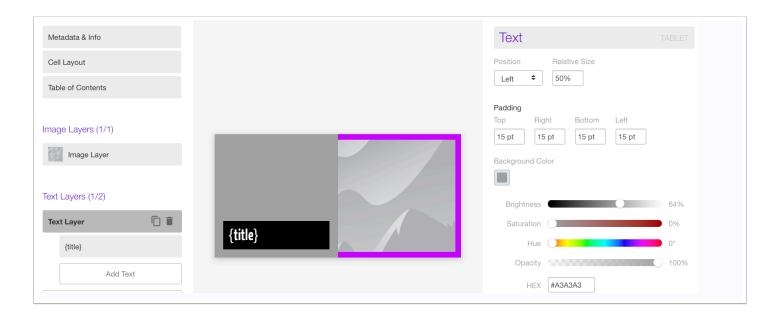


Define how a cover image for the cell should be handled:

- Position & Relative Size: You can define where the cover image needs to be placed in your cell.
- Padding: Set padding for extra spacing around the cells
- · Content Mode:
 - · Scale to Fill
 - Aspect Fit
 - Aspect Fill
- Background Color: Choose a background color for your Image Layer



4.2.5. Text Layers



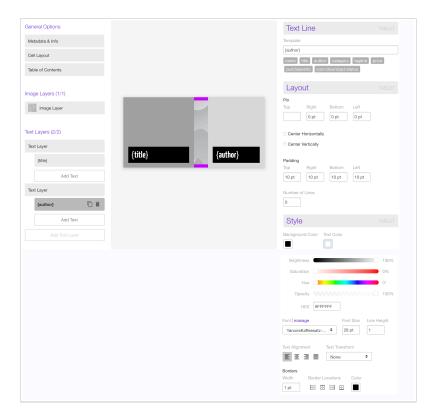
Defines how a Text Layer for the cell should be handled:

- Position & Relative Size: You can define where the Text Layer needs to be placed in your cell and how large it is relative to the cell.
- Padding: Set padding for extra spacing around the Text Layer.
- Background Color: Choose a background color for this Text Layer.

Note that you can add another Text Layer with specific properties. E.g. add another Text Layer at the right side of this cell with another background color (see next screenshot).

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4.2.6. Text Lines



Text Line:

• **Template:** Adds several placeholders according to what you want to see displayed in the cell. If this text is fixed, you can also enter your own text line.

Layout:

- Pin: You can choose to which side(s) the Text Line needs to be pinned.
 - Empty = No pin.
 - A value in pt = A pin with the selected distance (0-...).
- Padding: Defines spacing around the title (in the background color).
- Number of lines:
 - 0: If multiple lines are needed to fill in all the text, lines will be added. If no more lines can be added, the text will be truncated with ...
 - >1: The text will be filled in in the defined amount of lines. If the text has overset, the text will be truncated with ...

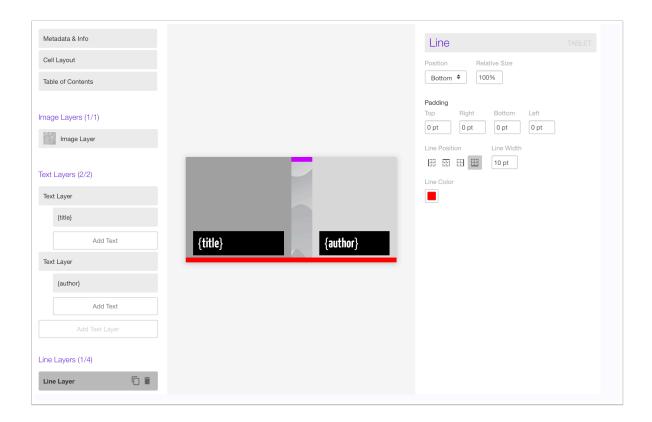
Style:

- Background Color: Fills a background color for your Text Line.
- Text Color: Defines the color of your text.
- Title Font: Selects a font (requires that you have added custom fonts).
- Font Size: Adjusts the font size.
- **Line Height:** Defines the spacing from 0,5 to... of your lines but always check with your font size and cell height.
- Text Alignment: Aligns the text.

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- **Text Transform:** Has 4 options: None (leave unchanged), Upper Case, Lower Case or Title Case.
- Borders: Applies borders to your Text Line.

4.2.7. Line Layers



You can add an extra line to your cell (up to 4 line layers), completely independent from the rest of your layout.



NAMING YOUR ITEM STYLES

As most apps use several item styles, giving an clear and unique name for each and every item style is key. Think about the combination of your item style names with those of your grid style names too. This will make your work much easier later on!



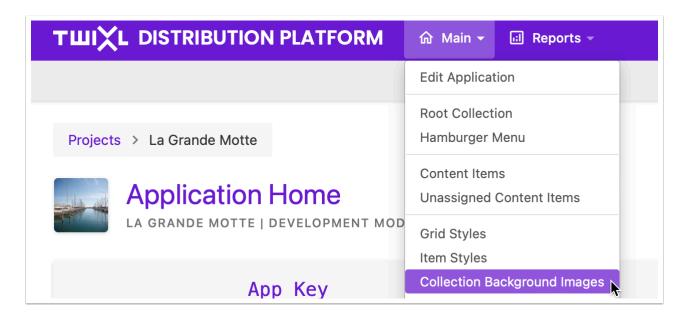
Styling: Custom Background Images

Did you know you can define a custom background image for your collections? This article shows you how!

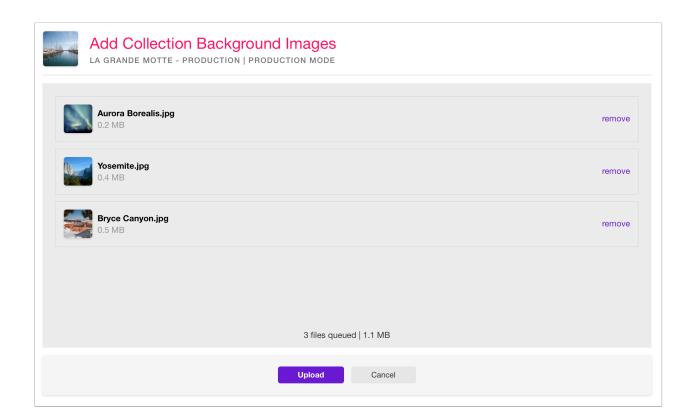
1. Watch a short 'How to' video...

2. Working with Custom Background Images for your collections

In addition to defining a background color for your collection, you can also use an image as the background. We provide a way to create a repository of images that you can use in the grid styles of your app.



To upload your images, select 'Custom Background Images' from the app's top menu, then select 'Add Images'. In the drop zone, you can add one or more .jpg or .png files.

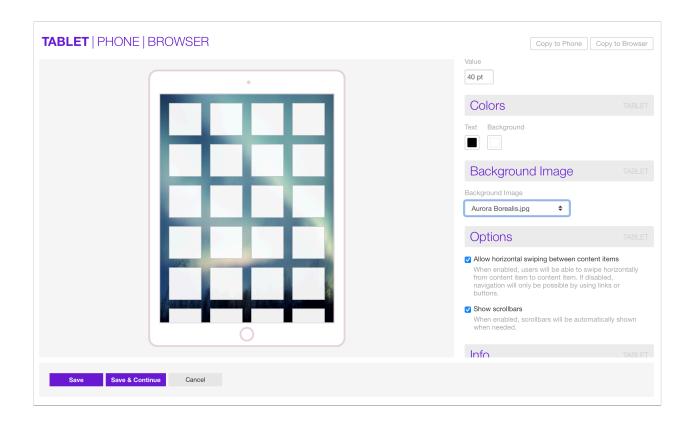


Once you click 'Upload', these files can be used in the <u>grid style</u> editor. In the editor, Add or Edit a style. The images you uploaded will be available under the section 'Background Image'.

If you select an image, you'll get a preview of the result (how much you'll see of the image will also be dependent on your padding settings).

Because different grid styles can have a different background image, you can choose to use different backgrounds for different collections. You can also use different images for tablet / phone / browser.

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Styling: Custom Fonts

If you need to get your app in line with the corporate identity or you want the app to stand out with a unique style, you can upload custom fonts or use Google fonts within the app.



IMPORTANT NOTE:

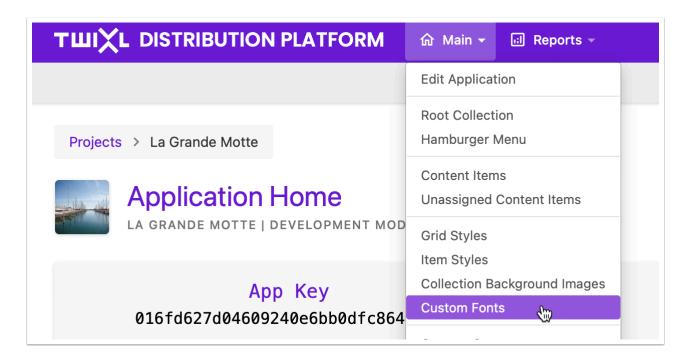
Only import the fonts you are really using as all fonts will be downloaded to each device and it will make your app larger in memory.

1. Working with Custom Fonts

Does your company or customer use a specific or custom made font and is the company style design requiring to use this font within the app? Working with custom fonts is very easy within Twixl Publisher.

First, upload the custom font to the Twixl Platform via the menu on the homepage of your app before adding it to a style.

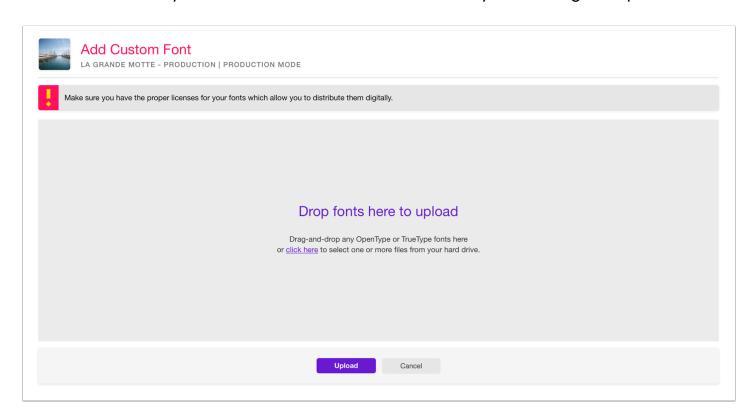
In the menu dropdown > select 'Custom Fonts' > 'Add custom fonts'



Drag and drop your font file here or select the file on your drive.



· Add this font to your list of fonts on the Twixl Platform by confirming via 'Upload'.



Once the font has been uploaded, you will be able to select it if you edit the application options or define them in the item styles.

IMPORTANT NOTES:

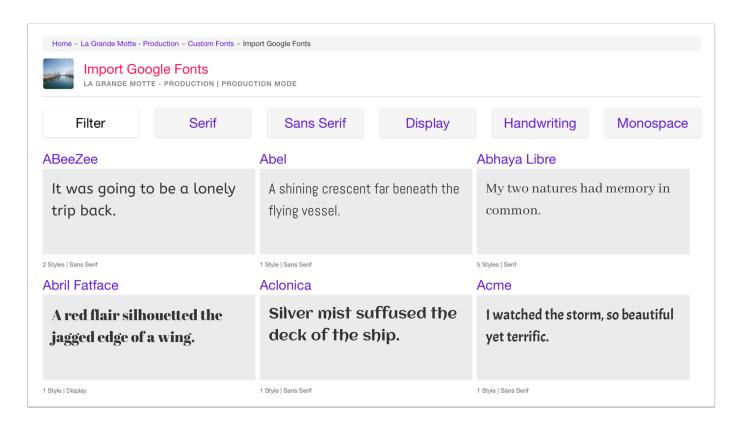
- You can either add Truetype (.ttf) or OpenType (.otf) fonts.
- Make sure you have the proper licenses for your fonts that allow you to distribute them digitally.

2. Working with Google Fonts

If you don't have a custom font but want to theme your app, the Google Fonts option is a great feature.

All Google Fonts you want to use in your app first have to be imported in the Custom Fonts section.

- In the menu dropdown > select 'Custom Fonts' > 'Import Google Fonts' > this will open the Google Fonts Interface
- Search for or filter a specific Google Font > 'Import' the font





EXTRA INFO ABOUT GOOGLE FONTS:

Google Fonts are free to use, even for commercial usage!

If you want to learn more about Google Fonts, see this web site.



Preview an app in the iOS Simulator

You can preview a complete test app in the iOS Simulator. Find out how in the article below.

1. Introduction

1.1. Requirements

- · A Mac with Twixl Publisher installed
- Xcode

1.2. Advantages

- You don't need to have access to a physical device to preview your article-based app.
- The app will react and behave in exactly the same way as an app deployed in the App Store.
- The app can be tested on different types of iOS devices (iPhone and iPad).
- A preview in the iOS Simulator can be initiated right from the Twixl Platform.

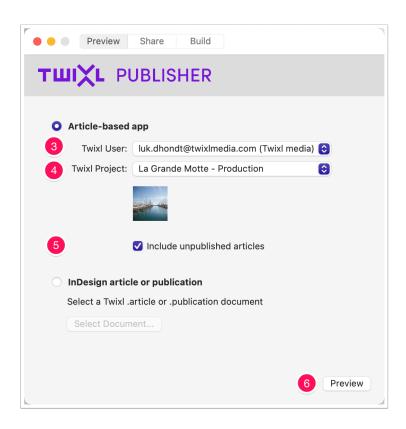
1.3. Disadvantages

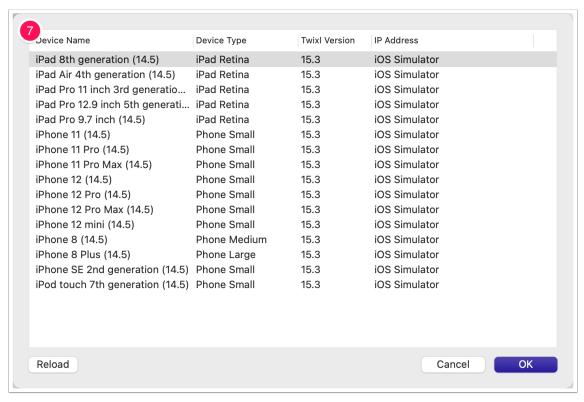
- This solution works only on a Mac
- It does not allow you to preview on Android devices

2. How do I do this?

- 1. Launch the *Twixl Publisher macOS App*, and make sure you have added your Twixl account under Preferences. See <u>this article</u> for details on how to add a Twixl User.
- 2. Click the Preview tab.
- 3. Select the correct Twixl User.
- 4. Select the correct Twixl Project (your Twixl App).
- 5. Select whether you want to include unpublished articles or not.
- 6. Click Preview.
- 7. Choose the desired iOS Simulator and iOS version and click Continue.
- 8. Wait for the Twixl Publisher macOS App to finish the build.
- 9. You can now test your app in the iOS Simulator.

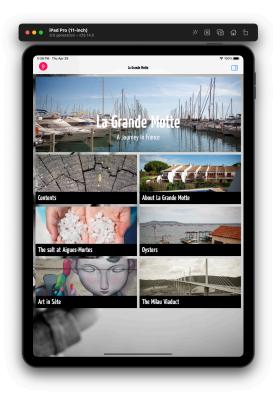
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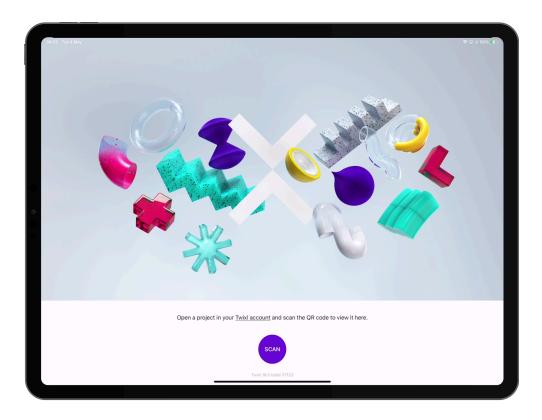


Preview an app on a mobile device

There are two ways to preview your app content:

- 1. Preview your app in the iOS Simulator.
- 2. Preview an app with the Twixl app.

The **Twixl App** allows you to preview your apps and check what your browse pages and article details will look like without first needing to create a real test app. You just need to scan a QR code. The article below shows you how.



Previewing your app

When you are logged in on the <u>Twixl Platform</u> as an *Administrator* or *App Administrator* (see Manage Users), you have 2 options:

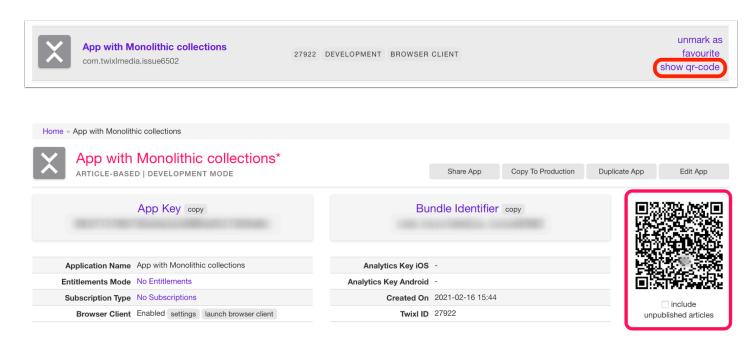
- 1. In the Application Overview, you can select the option **show qr-code**.
- 2. In the Application Detail View, you can see the QR code right away.

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Open the **Twixl app** on your mobile device (*Android* or *iOS*), tap **SCAN** and scan the **QR-code**. Your app will display the preview in the **Twixl App**. The Root Collection will kick in and you can check how content is displayed.

Just below the QR code, you can check 'include unpublished articles' so content items that have not been published yet will also be included in the preview.

You can make adjustments in the Collection, Browse Grid Styles, Cell Styles or any content/setting and these will be reflected in the app after a refresh (the 'refresh' icon is located in the toolbar if you are using a Hamburger menu).



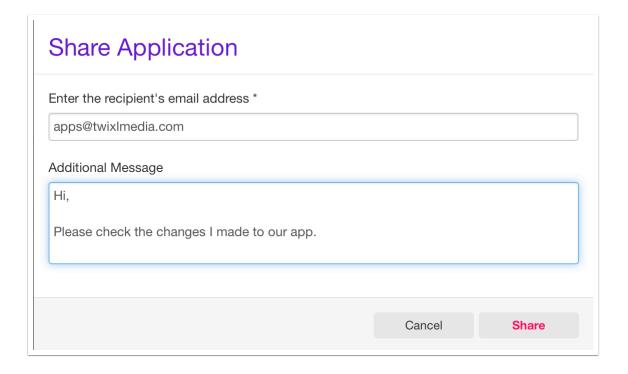
Sharing your app

For an Administrator or an App Administrator, it's also very easy to share an app with e.g. a customer, a copywriter, etc. You have 2 options:

- 1. You can use the traditional *App Reviewer* user. See <u>Manage Users</u> for more info. This option is an additional way to give somebody a more permanent access to an app. The *App Reviewer* needs to login on the Twixl platform and there he/she will find an overview of all the assigned apps, with easy access to the **QR codes**.
- 2. You can also share your app with anyone without creating an *App Reviewer* user. Click **Share Application** in the *Application Detail*, fill in the required fields and go! The recipient will receive clear instructions via email.









Creating your Launch Image

If you want to <u>build your custom Twixl App</u>, you can add a Launch Image. We created a special Photoshop template that explains how to do this.

1. What?

The Launch Image is what it says: it's the first thing your users see when they launch your app.

2. Requirements?

You configure the Launch Image of your app in the build setting of your app. It needs to be:

- square
- 2208px **by** 2208px
- .png format

3. How to design?

We use one Launch Image for both Phones and Tablets.

This means that the image gets cropped and this can impact your design. So it's better to take this into account when creating your launch image.

4. What's next?

Once you finished your Launch Image, you can go ahead and build your app.

The following articles will help with the next steps:

- Build Settings overview
- Building your Twixl app



How to migrate from legacy Cell Styles (pre-TP10) to Item Styles

1. About Item Styles

Since version 10 of Twixl Publisher, we moved from the legacy 'Cell Styles' to the new 'Item Styles'. Item styles offer a lot more possibilities, but the requirement is that your app needs to be built using Twixl Publisher 10 or higher.

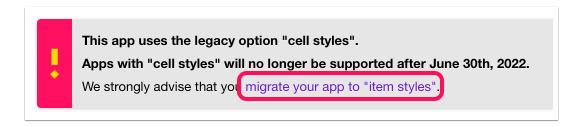
Important: if your Twixl app was built with a version older than TP10, you will need to make sure your app is updated first using the latest release.

The following table explains the matrix of versions:

Twixl Platform	App Version (iOS and/or Android	Result in the app
Cell Styles (you didn't migrate the app on the Twixl Platform yet).	Version 9.x or lower	All Cells will be rendered correctly
Cell Styles (you didn't migrate the app on the Twixl Platform yet).	Version 10.x or higher	All Cells are backwards compatible and will be rendered correctly.
Item Styles (you migrated the app on the Twixl Platform).	Version 9.x or lower	No Cells will be visible, because Item Styles can only be rendered in a 10+ version of a Twixl app.
Item Styles (you migrated the app on the Twixl Platform).	Version 10.x or higher	Both converted Cell Styles and new Item Styles will be visible in a 10+ version of a Twixl app.

2. How to migrate if your users are on an app built with TP10 or higher?

If all the users of your app are on a Twixl version 10 or higher, then you can just go ahead and select '**migrate your app to 'item styles**" on the main page for your app on the platform. You can use the report 'Views by Twixl version' to verify this.



Once you've done that, you can take advantage of the extra features that are possible when using 'Item Styles'. As always, it is recommended that you plan regular updates of your Twixl app, based on the latest Twixl release, as this guarantees support for newer iOS or Android versions, newer devices, bug fixes, etc.

3. How to migrate if your users are on an app built with a version older than TP10?

Make sure you read each step carefully!

(1) IN SHORT: WHAT'S IMPORTANT:

- You'll need to be able to serve your content to both versions of your app: version
 9.x or lower and version
 10+ or higher. This way you can migrate easier and avoid errors.
- There is one big keyword: testing!

3.1. Create a copy of your existing app on the Twixl platform

The first thing to do, is to create a duplicate of your existing app on the Twixl platform:

- 1. The new copy will be connected to your version 10+ build of the app. Rename the app, as an internal reminder that this will be the new version of your app. E.g.: add a suffix v17.
- 2. The existing copy will continue to serve your version 9 of the app. Rename the app, as an internal reminder that this will be the new version of your app. E.g.: add a suffix v9.

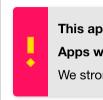
DEVELOPMENT vs. PRODUCTION



We strongly advise you to create a Development version first. This will make it easier to test your newly updated app on your own devices first. In your Production app, select 'Copy to Development' to create the new app to test.

3.2. Migrate the new app on the Twixl Platform to 'item styles'

In order to use the new Item Styles, you'll need to convert the copied v10+ app on the platform.



This app uses the legacy option "cell styles".

Apps with "cell styles" will no longer be supported after June 30th, 2022.

We strongly advise that you migrate your app to "item styles".

3.3. Adapt your Browse Grids and Item Styles (optional)

If you want (and if necessary) to make use of the new layout options, you can now adapt the Item Styles. See:

- Styling: Grid Styles
- Styling: Item Styles

3.4. Test your app built with the latest version of Twixl Publisher

As always, **testing** is the most important thing. You can test your new app as follows:

- Test and preview with the Twixl App. See the following articles:
 - Preview article-based app in iOS Simulator
 - Preview an app on a mobile device
- For iOS, create an Ad Hoc or TestFlight build and test your new design. See:
 - Building your app
 - iOS app build types
 - Android app build types



3.5. Create your final production build and submit the app

After testing, it's time to create a final build of your Production App and submit that build to the stores.

When the update is published and most or all of your users have updated to the latest release, you can delete the old 'cell style' version of your app. You can use the report 'Views by Twixl version' to verify how many users are on the latest version.