



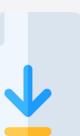
Recording will
be shared

Welcome to the Timeline Chart Workshop!

Download
Code & Slides

bit.ly/kdp-timeline

git clone the
GitHub Repo



Get Your
Kintone Subdomain

Developer License
Registration Form

bit.ly/KDP_NEW



Asking Questions
& Raising Hands

Post questions in
the chat anytime!

Include your code
& error messages.





FYI 😊

YouTube

Subscribe to get notified we upload the recording!

bit.ly/KDP_Video



Gift Card Raffle

Stay till the end to **enter a raffle!**
Get one \$25 gift card!



SWAG Gift Away

Fill out our survey to get **free swag!**

Limited to North American addresses





Get Started

Let's set up our workshop's codebase!

Repo: <https://github.com/kintone-workshops/timeline-generator-amcharts>

Run these commands
from your terminal

```
cd Downloads
```

```
git clone https://github.com/kintone-workshops/timeline-generator-amcharts
```

```
cd timeline-generator-amcharts
```

```
npm install
```

```
npm install -g @kintone/customize-uploader
```



Get Your Kintone Subdomain

bit.ly/KDP_NEW

- ✓ Use Chrome or Firefox
 - ✗ NOT Safari
- ⚡ Accept Cookies First
- ⚠ Only Use
 - lowercase [a-z]
 - numbers [0-9]
 - hyphens [-]
- 🤖 Ex: cool-robot-v5

The screenshot shows a web form titled "kintone developer program". At the top, there's a navigation bar with a menu icon, the title, and a search icon. Below the title is the heading "Kintone Developer License Terms of Service". The form contains several input fields and dropdown menus:

- Text input fields for "First Name*", "Last Name*", and "Email*".
- A dropdown menu labeled "Which of the following best describes you?" with an option "Please Select".
- A section "What first interested you in a Kintone Developer License?" with checkboxes for "Kintone Workshops", "dev.to Articles", "YouTube Videos", and "Other".
- A section "What are you interested in using the Developer License for?" with checkboxes for "Studying programming", "Codeless app development", "Easy to use backend / Database", "Making plugins for clients", "My workplace uses it", and "Not sure yet!".
- A text input field at the bottom for "Create your Kintone Developer License subdomain (lowercase, numbers and hyphens only)*".



Get Your Kintone Subdomain

The login name is your email

Remember your subdomain!
Your Kintone's login link will be
YOUR_SUBDOMAIN.kintone.com



Kintone developer program

Kintone Developer License Terms of Service

First Name* Last Name* Email*

Which of the following best describes you?

Please Select

What first interested you in a Kintone Developer License?

Kintone Workshops
 dev.to Articles
 YouTube Videos
 Other

What are you interested in using the Developer License for?

Studying programming
 Codeless app development
 Easy to use backend / Database
 Making plugins for clients
 My workplace uses it
 Not sure yet!

Create your Kintone Developer License subdomain (lowercase, numbers and hyphens only)*
For example: mydomain, coffee-lovers



When You Need Help 💪

Resources:

- README's Debugging section
- Posting questions in the chat

**Post questions in the chat
anytime!**

Please include your code &
error messages.

README.md

Debugging - Let's Fix Those Problems 💪

Here is a rundown of common problems & their solutions!

Errors related to .env

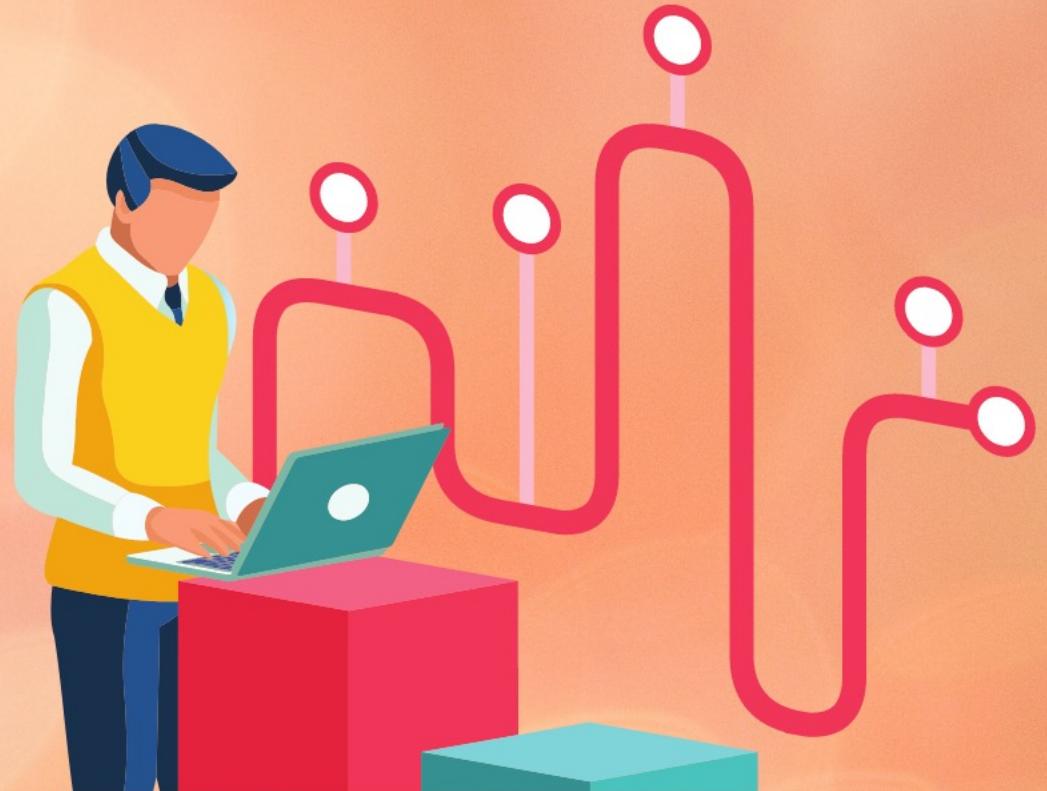
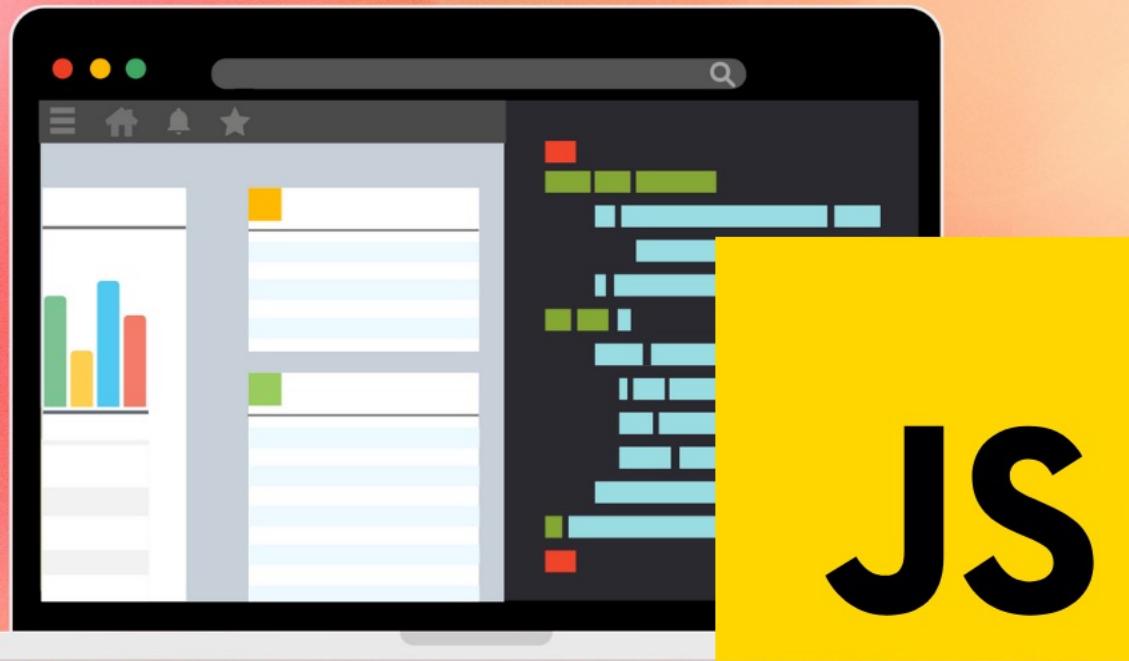
Are you getting one of the following error messages? If you get one of the following error messages, then please verify , and you have not modified the `.env.example`

- Failed to find `.env` file at default paths:
`[./.env,./.env.js,./.env.json]`
- [webpack-cli] Error: Missing environment variable:
`KINTONE_BASE_URL`
- [webpack-cli] Error: Missing environment variable:
`KINTONE_USERNAME`
- [webpack-cli] Error: Missing environment variable:
`KINTONE_PASSWORD`
- [webpack-cli] Error: Missing environment variable:
`VIEW_ID`



No Server Data Visualization

Build a Timeline Chart!





How Confident Are You in JavaScript?

From a scale of 1 to 5,
comment on Zoom Chat
how you feel about JavaScript



Meeting Chat

Sean / ショーン@Kintone Tokyo to Everyone 16:08

Excited for the workshop!

How comfortable is everyone with Javascript?

Me to Everyone 16:08

3

Who can see your messages? Recording On

To: Everyone ▾

Type message here...



Hello From Kintone

Sean



Genji

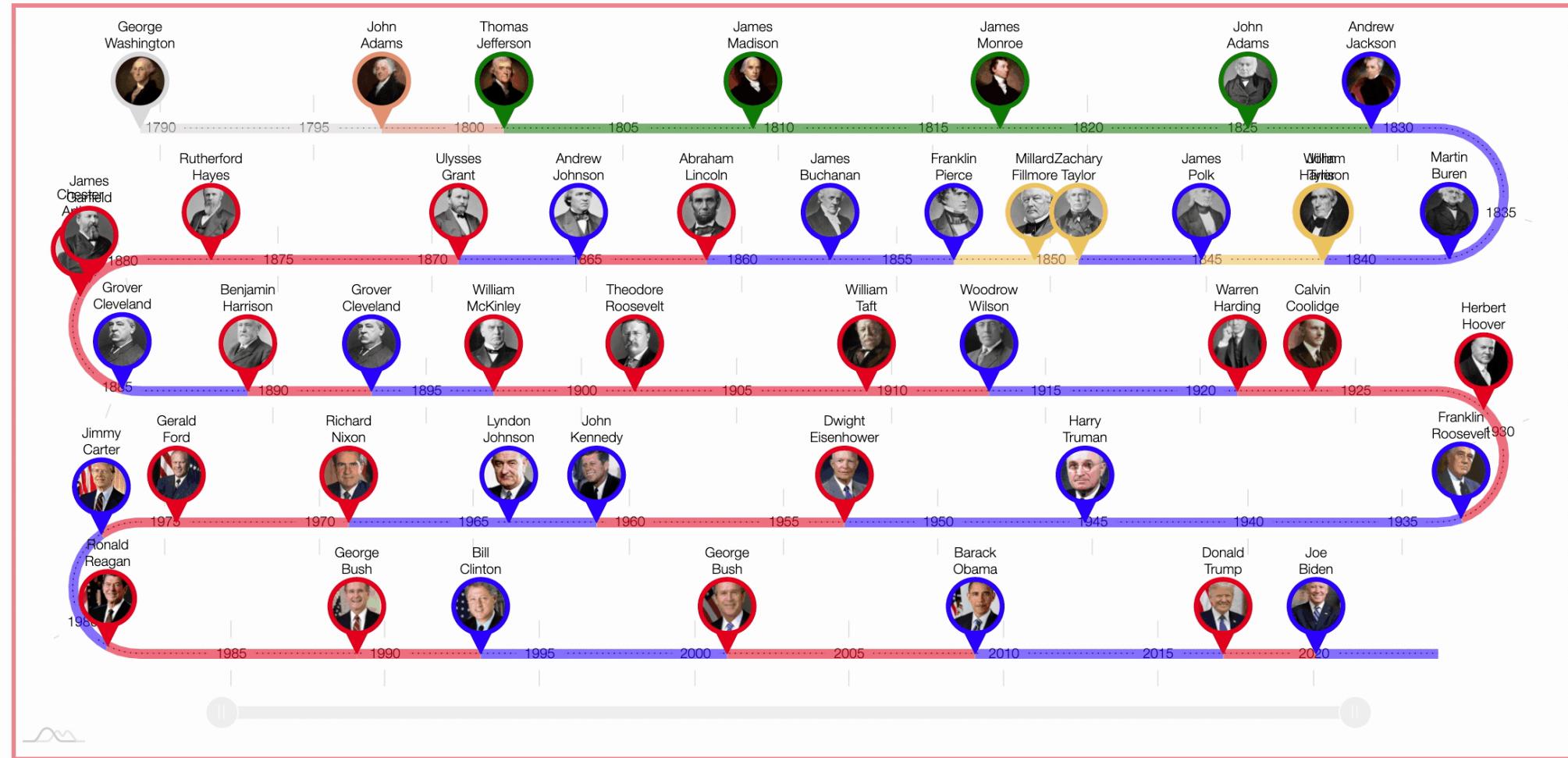


Jesslyn





What We Will Make Today





Workshop Overview

Project Setup

- Install Dependencies
- Create an .env file
- Create a Web Database

Coding

- Kintone Customize Uploader
- Understand amCharts
- Map Kintone Data

Extras!

- How to get Kintone Support
- How to use other amCharts
- Refactor codebase

Download the Repo

- Installing these dependencies takes time so run it in the background
- Details are listed in the **Get Started** section

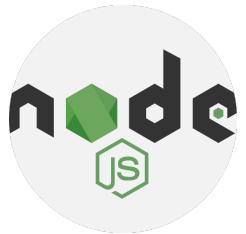
```
cd Downloads
```

```
git clone https://github.com/kintone-  
workshops/timeline-generator-amcharts
```

```
cd timeline-generator-amcharts
```

```
npm i
```

```
npm i -g @kintone/customize-uploader
```



Check Node.js & npm version

Check the versions

Check the versions via terminal

```
$ node -v  
$ npm -v
```

Required for React:

Node ≥ 14.00 & npm ≥ 5.6

If missing, install

New to Node.js?

Check out [Guide on Installing Node.js & npm](#) section

There is a companion video:

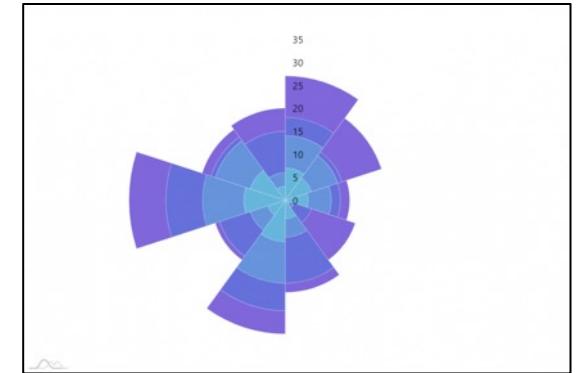
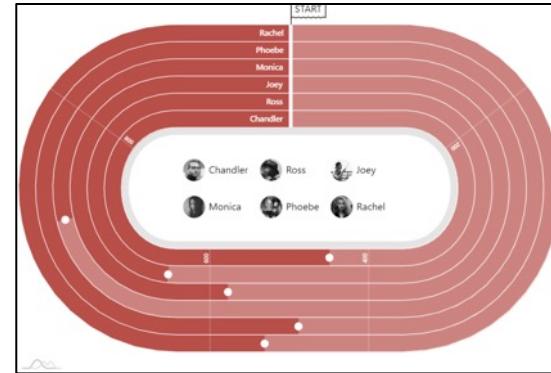
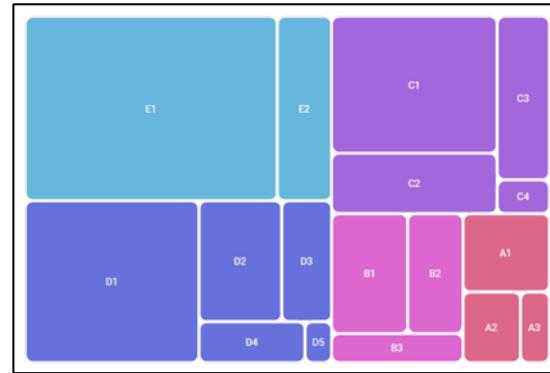
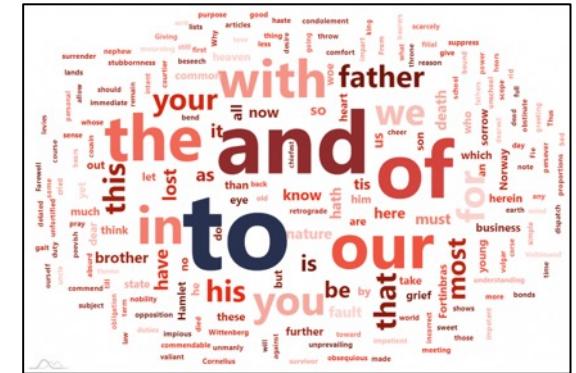
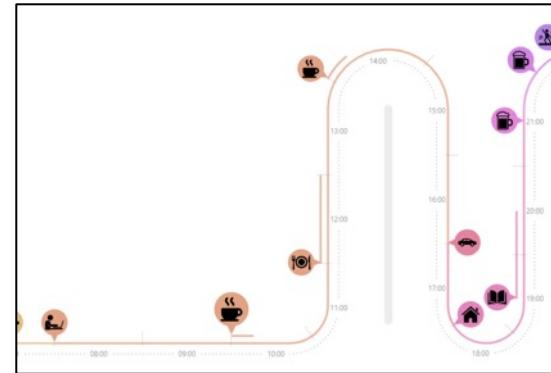
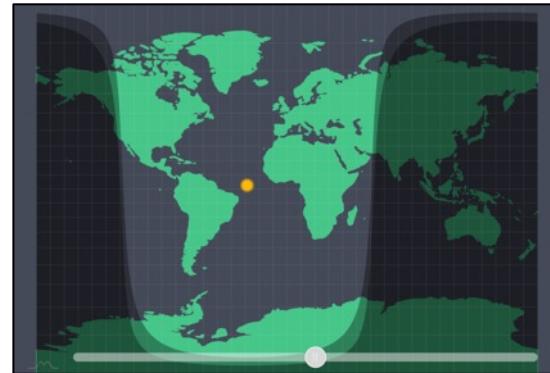
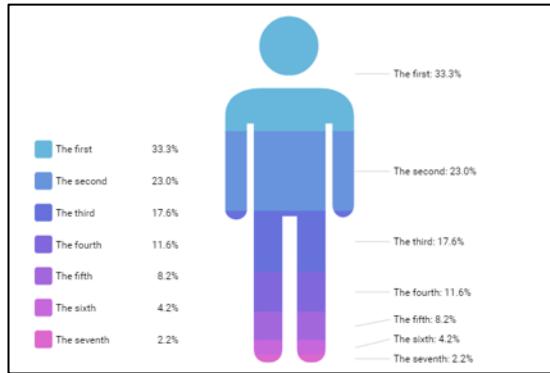


youtu.be/4Kw-i_rX3tY

Quick Dive into amCharts!



What Does amCharts Offer?



<http://www.amcharts.com/>

amCharts 4 vs 5

- amCharts 4 & amCharts 5 are conceptually different libraries.
- Not an upgrade
- code are not interchangeable.

More info at amcharts.com/docs/v5/migrating-from-amcharts-4/

amCharts 4 vs 5

amCharts 4

- uses SVG
- 2 ways to configure charts:
 - object/procedural
 - JSON configs.
- Supports [TimeLine Chart](#)

amCharts 5

- uses [Canvas API](#)
- Only 1 way to configure charts:
 - Only object/procedural
 - (No JSON configs.)
- Supports [Stock chart](#)

How to Use amCharts (Frontend JavaScript)



Define website details

```
<html>
  <body>
    <h1>My Graph</h1>
    <div id="chartdiv"></div>
  </body>
</html>
```



Read libraries

```
<script src="https://www.amcharts.com/lib/4/core.js"></script>
<script src="https://www.amcharts.com/lib/4/charts.js"></script>
```

Define chart details

```
// Create chart instance
var chart = am4core.create("chartdiv", am4charts.PieChart);
// Add and configure Series
var pieSeries = chart.series.push(new am4charts.PieSeries());
pieSeries.dataFields.value = "litres";
pieSeries.dataFields.category = "country";
```

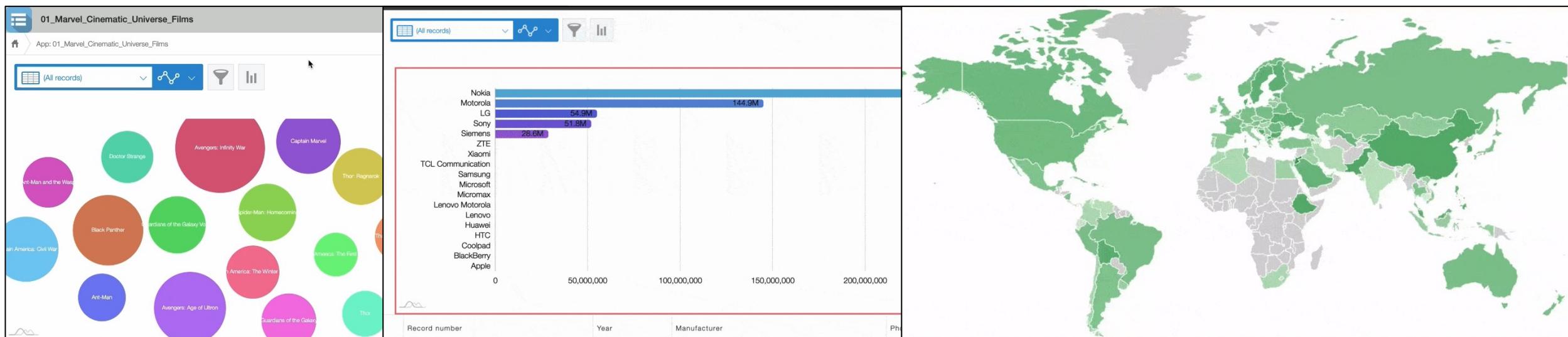
Define data

```
// Add data
chart.data = [ {
  "country": "Lithuania",
  "litres": 501.9
}, {
  "country": "Czechia",
  "litres": 301.9
}, {
  "country": "Ireland",
  "litres": 201.1
}]
```

Overview of amCharts on Kintone

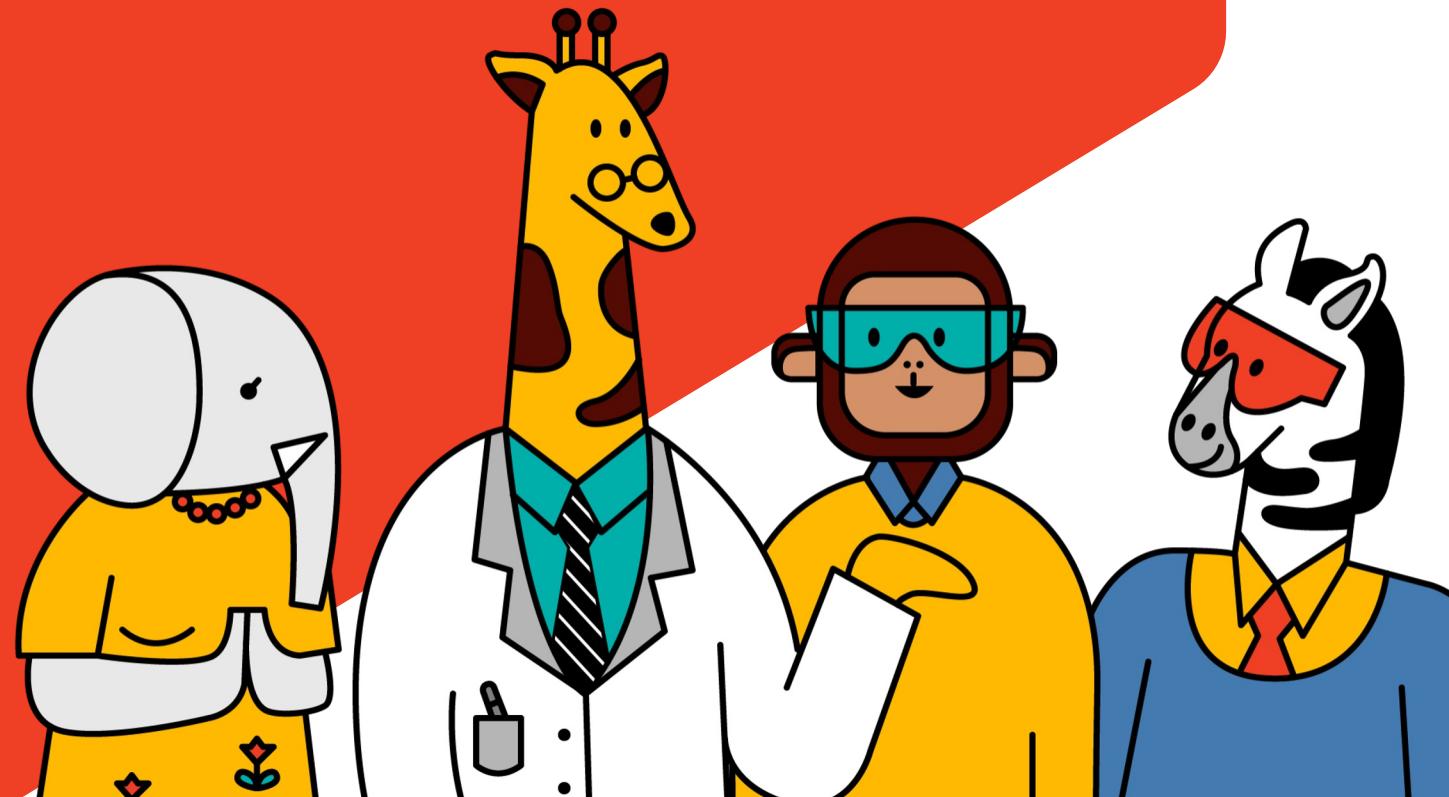
Kintone Web Database App holds the **data**.

Then our **JavaScript customization** passes the data to
amCharts library it is visualized with their stylish charts!



What is Kintone?

Built for teamwork,
designed by you



What is Kintone?

The screenshot displays the Kintone interface with several sections:

- Customer Database:** Shows a list of databases: Admin:Green, Admin:Green, Admin:Green.
- Sales Leads:** Shows a list of leads: Admin:Green, Admin:Green.
- Contact Log:** Shows a list of contacts: Admin:Green.
- Threads:** A list of threads: Deal Flow (Apr 3 11:24 AM), Sales Division (Apr 1 11:49 PM), Monthly Reports (Apr 1 11:45 PM).
- Apps:** A list of applications: Vendor Database, Item Database, [Of] Product List, [Of] Invoices, [Of] Seminar Survey, [Of] Attendee Lists, [Of] Event Calendar, [Of] Activity Log, [Of] Sales Leads, [Of] Customer Database.
- Dashboard:** Contains two charts:
 - A bar chart titled "[Of] Sales Leads: Monthly Expected Sales (per priority)" showing sales for Middle, High, and Low priorities across months from Apr 01, 2019, to Mar 01, 2020.
 - A pie chart titled "Total(Amount)" showing the distribution of total amount by creator type: Form Creator (\$630, 4.5%), Viewer (\$1440, 10.3%), T/C (\$1650, 14.0%), Int Creator (\$4202, 30.1%), and kintone (\$5718, 41.5%).
- People:** A list of members: Hiroko ..., Mary Si..., John S..., Rudy Red, Polly Pink, Bill Blue, Glen Gr..., Paul Gray, Mark Pe..., Dannie ...

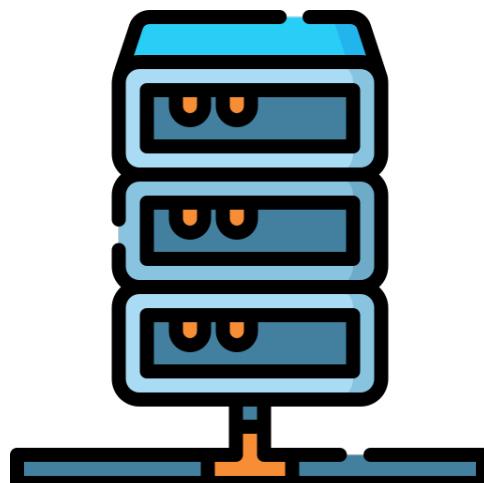
At the bottom left, it shows the date and time: Apr 1 10:43 PM and the user: Mary Simpson.

Kintone is a **no-code / low-code** cloud platform for teams to easily share and **collaborate** on their **data** efficiently.

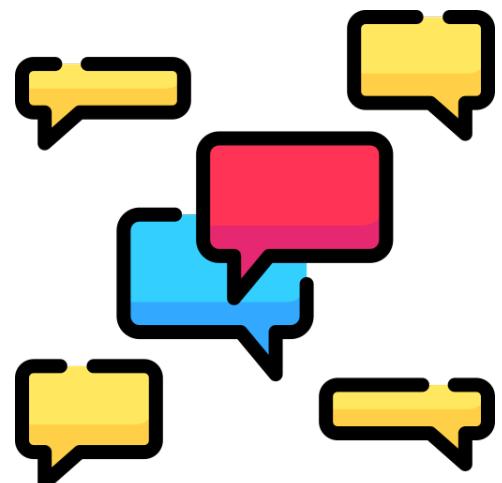
Where Kintone is Special!



kintone



Data & the conversations
about the data are
all in one place



Missing - Unified Communication

Where did that message go?

Data Silos

Information is not being shared effectively

Scattered Communication
Unclear where the conversation is happening

What is Possible?

A screenshot of the Kintone REST API Docs interface. The top navigation bar shows 'Space: Developer Community' and 'App: REST API Docs'. The main content area displays a table of contents for the REST API, with sections like 'EN Section', 'EN API Group', 'EN Method', 'EN API Name', 'EN URL (Endpoint)', and 'EN Article Link'. Below this is a 'Fix History' section with a table showing a fix made on Aug 27, 2020, by Clare - Support, which fixed the GET API List API link.

Where
Data
Lives

Remove the Friction
Keep the conversation
where the data lives

A screenshot of the Kintone REST API Docs interface, identical to the one above but with a blue border. It shows the same table of contents and fix history table.

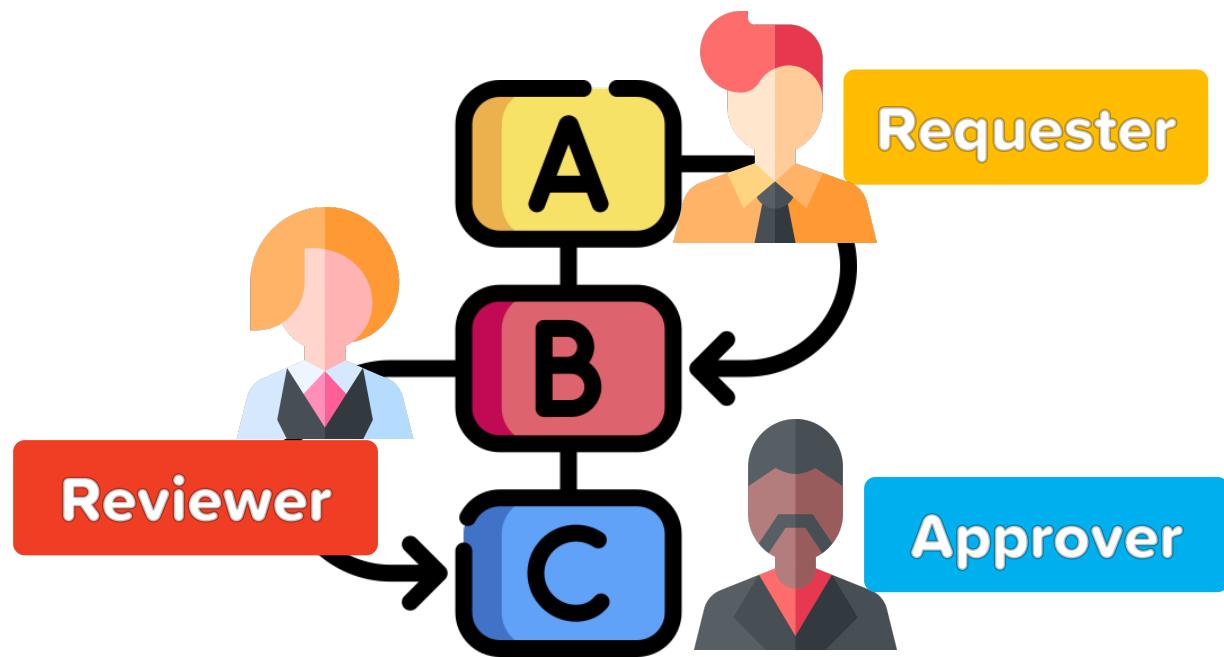
A screenshot of a communication feed titled 'Write your comment here.' It shows a conversation between three users:

- User 3: Clare - Support (@Sharon - Developer @Genji) says 'Done!' and provides a 'Like' and 'Reply' button.
- User 2: Sharon - Developer (@Genji) responds with 'Oh, shoot, thanks for catching my mistake!'
- User 1: Genji (@Clare - Support) asks 'Please fix the Fixed the GET API List API link' and provides a 'Like' and 'Reply' button.

Where
Communication
Lives

Workflow

With Process Management,
establish a workflow so that the
right people sees the **right info**
at the **right time**.



The screenshot shows a process management application interface with the following details:

- Space:** Developer Community
- App:** KDP Event
- View:** Summary
- Record:** No Server Data Visualization: Build a Word Cloud!

The current step is "Writing Report". The "Select Assignee:" section shows a list of users:

- Genji
- Sharon - Developer
- John - Manager
- Clare - Support** (selected)

Buttons at the bottom of the dialog are "Cancel" and "Confirm".

On the right side of the screen, there is a sidebar with comments and user interactions:

- Comment:** Write your comment here.
- User:** 2: John - Manager @Genji Assign this event to @Clare - Support
- Interaction:** 1 Unlike Reply
- User:** 1: Genji @Sharon - Developer The team worked together such a great way
- Interaction:** Like Reply

Kintone Apps

The screenshot shows the Kintone Shared To Do app interface. At the top, there's a navigation bar with icons for home, search, and settings, along with a 'Search in App' field. Below the header, the title 'Shared To Do' is displayed, followed by a breadcrumb path 'App: Shared To Do'. A descriptive text block explains the app's purpose: 'To Do App with Process Management feature. All tasks assigned to you can be viewed under "Assigned to me" section on the portal page. Always be organized and on time by setting up reminders and visualizing team's progress through snazzy graphs.' The main area features a table with the following columns: To Do, Priority, Due date, Status, Details, and Attachment. The table contains five records:

To Do	Priority	Due date	Status	Details	Attachment
Define requirements	Medium	Apr 05, 2019	In progress	Please start defining the requirements for our ne...	/x
Research vendors	Medium	Apr 08, 2019	Complete	Find at least 3 vendors and summarize their pro...	/x
Send invoice to customer	High	Apr 11, 2019	Assigned		/x
Define scope	Low	Apr 12, 2019	Assigned	XYZ Project would be a long project divided into...	/x
Map out schedule	Low	Apr 19, 2019	Assigned		/x

At the bottom of the table, it says 'Records 1 - 5 of 5'. The interface also includes a 'My To Do' button in the top left, a process management icon, a filter icon, and a chart icon.

The main building block in Kintone is an **App**.

Imagine an **App** as a powerful, online table where data is stored in records.

Kintone Apps

Sales & Leads > Settings

Last Updated: Mary Simpson 12:10 AM

Sales & Leads

Form Views Graphs App Settings

Save Form

Leads & Sales

Lead Title Sales Representative

Contact Info

Company Name Website

Contact Name Job Title

Email Telephone Number

Product Name Product ID Unit Price Quantity

Label Text
Rich text Text area
Number Calculated
Radio button Check box
Multi-choice Drop-down
Date Time
Date and time Attachment
Link User selection
Department selection Group selection
Related records Lookup
Blank space Border
Field group
Record number Created by
Created datetime Updated by
Updated datetime

Apps are easy to **create** using a **drag-and-drop** interface with no coding needed.

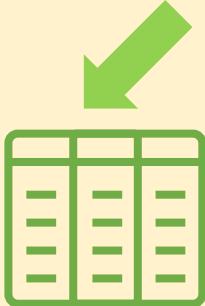
Apps are extensively **customizable** with client-side **JavaScript**.

Everyone Contributes!

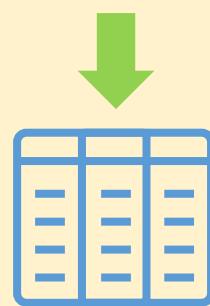
As a **no-code & low-code platform**, Kintone supports non-coders with visual programming UI while enabling sophisticated customization



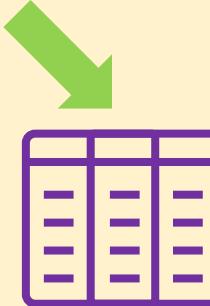
Anyone can create Apps that they need without coding



Product Catalog



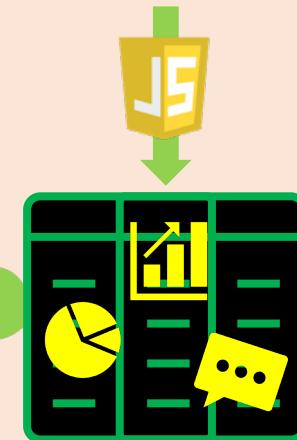
Knowledge Base



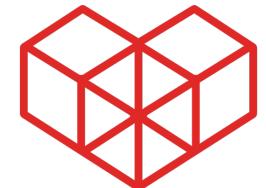
Job Vacancies



Developers can enhance the Apps with JavaScript



How Developers Contribute

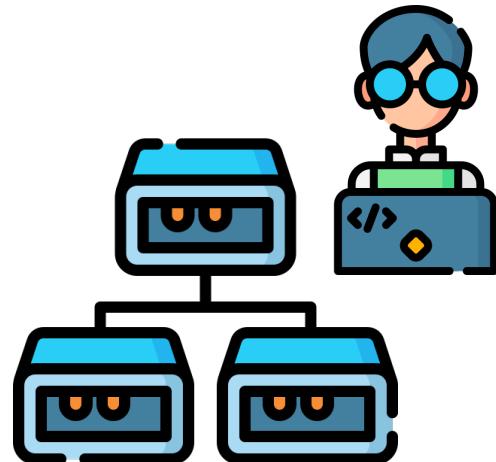


kintone
developer program

How Developers Contribute

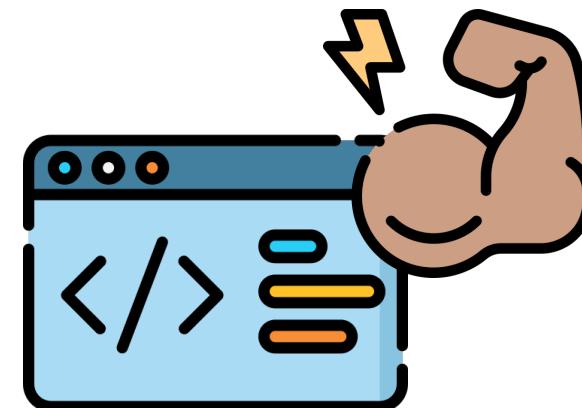
Command Center

- Create a custom look & feel
- Integrate with 3rd party web applications to exchange data



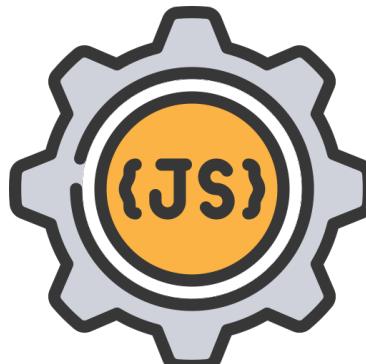
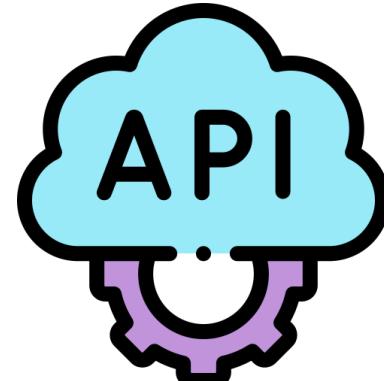
Enhancements

- Develop JavaScript customizations
- Build & share extensions



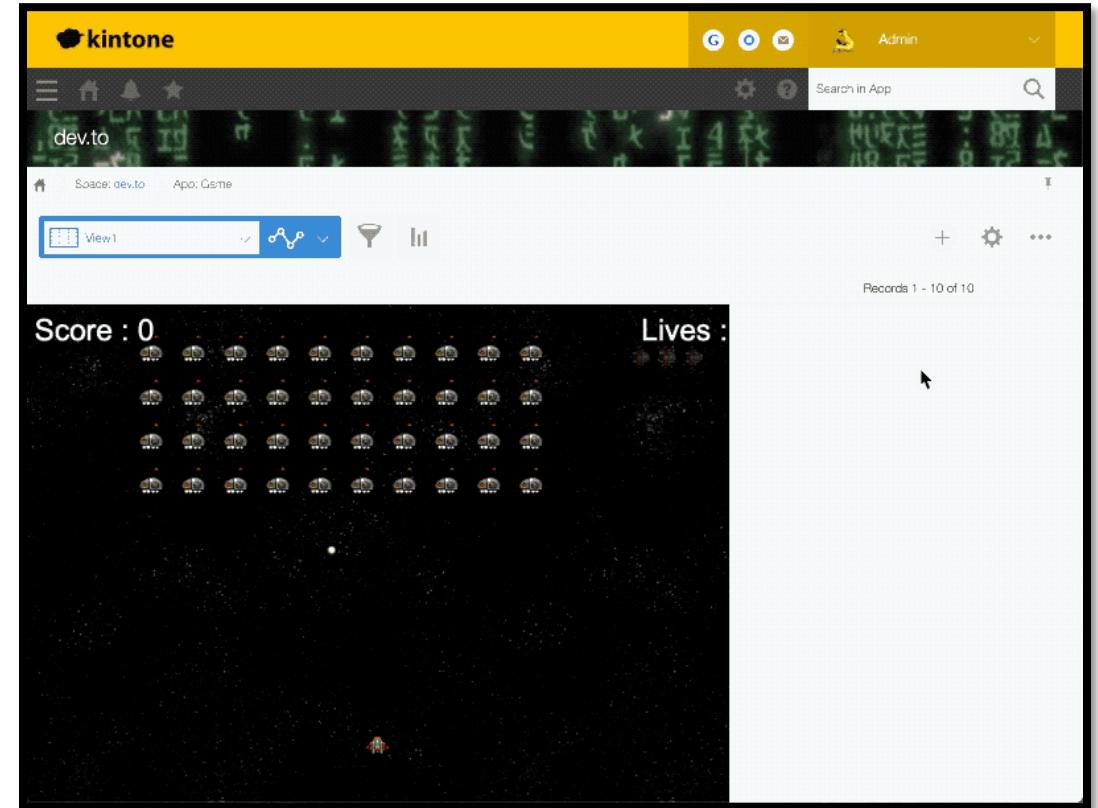
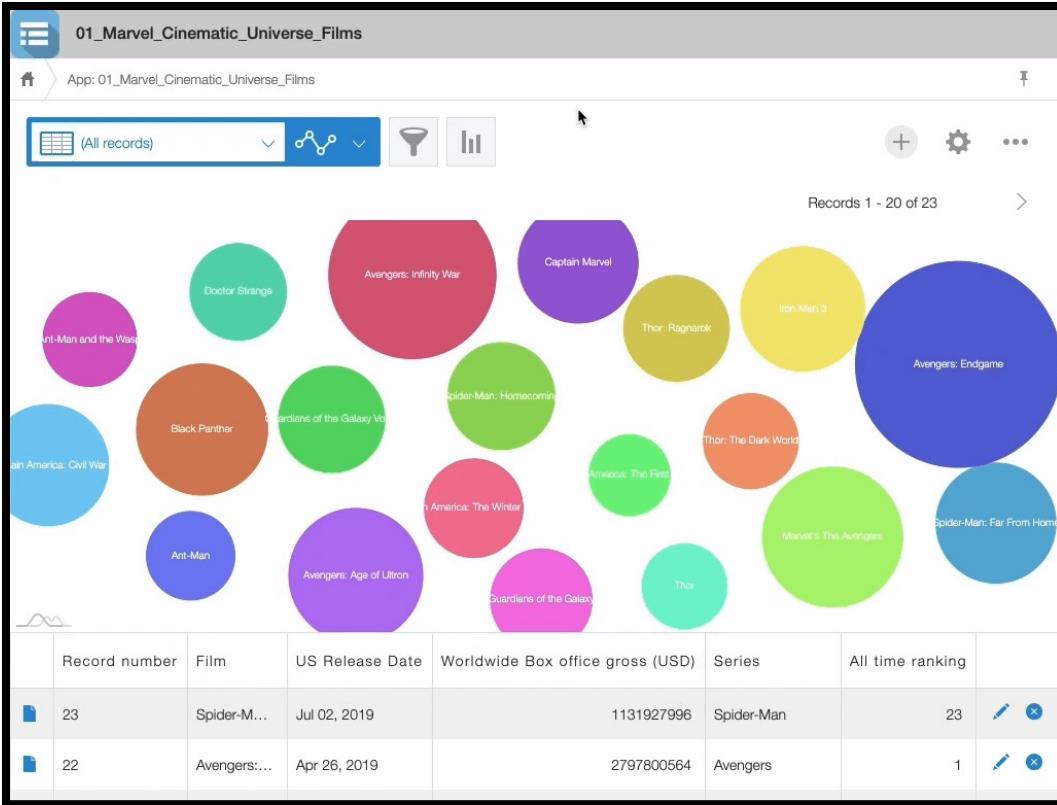
Tools Inside Kintone

- JavaScript APIs
- REST APIs
- API Tokens
- Webhook
- Plugins
- JavaScript Customizations
- CSS & HTML Customizations
- Precise Permission Controls



Create a Custom Look and Feel

Display data the way you want with HTML, JS, and CSS



Kintone For Self Learning



Keep learning new
JavaScript tricks!



Contribute your
learnings to tech
blogs



Share your
projects with your
community!

Kintone For Creating Revenue



Create & sell
Kintone
extensions



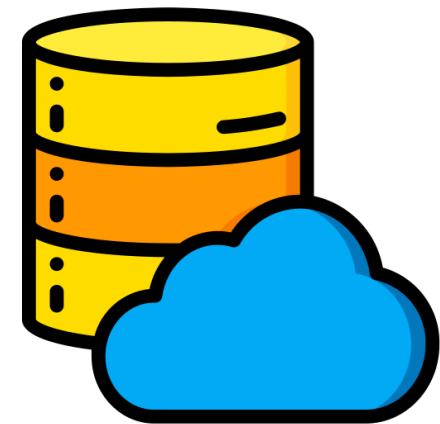
Consult with firms
on achieving
business goals



Develop Kintone
customizations for
customers

Let's Create a Kintone Database App

Step-By-Step Guide



Check Your Email



Welcome to Kintone! One More Step To...

A screenshot of a Gmail inbox. The subject of the email is "Welcome to Kintone! One More Step to Developer License". The email is from "Will Sayama akihiro-sayama@cybozu.com via bf06x.hubspotemail.net to me". The timestamp is "11:53 (3 minutes ago)". The email body contains an orange banner with the "kintone developer program" logo and the text "ONE MORE STEP FOR YOUR DEVELOPER LICENSE!". Below the banner, there is a message: "Howdy! Please click the button below to activate your developer license and complete the sign-up process." followed by a red "Activate Now" button. At the bottom, a note says: "Only valid for 24 hours. Please click [here](#) if an error is displayed after the expiration. Your subdomain name is devevents2."

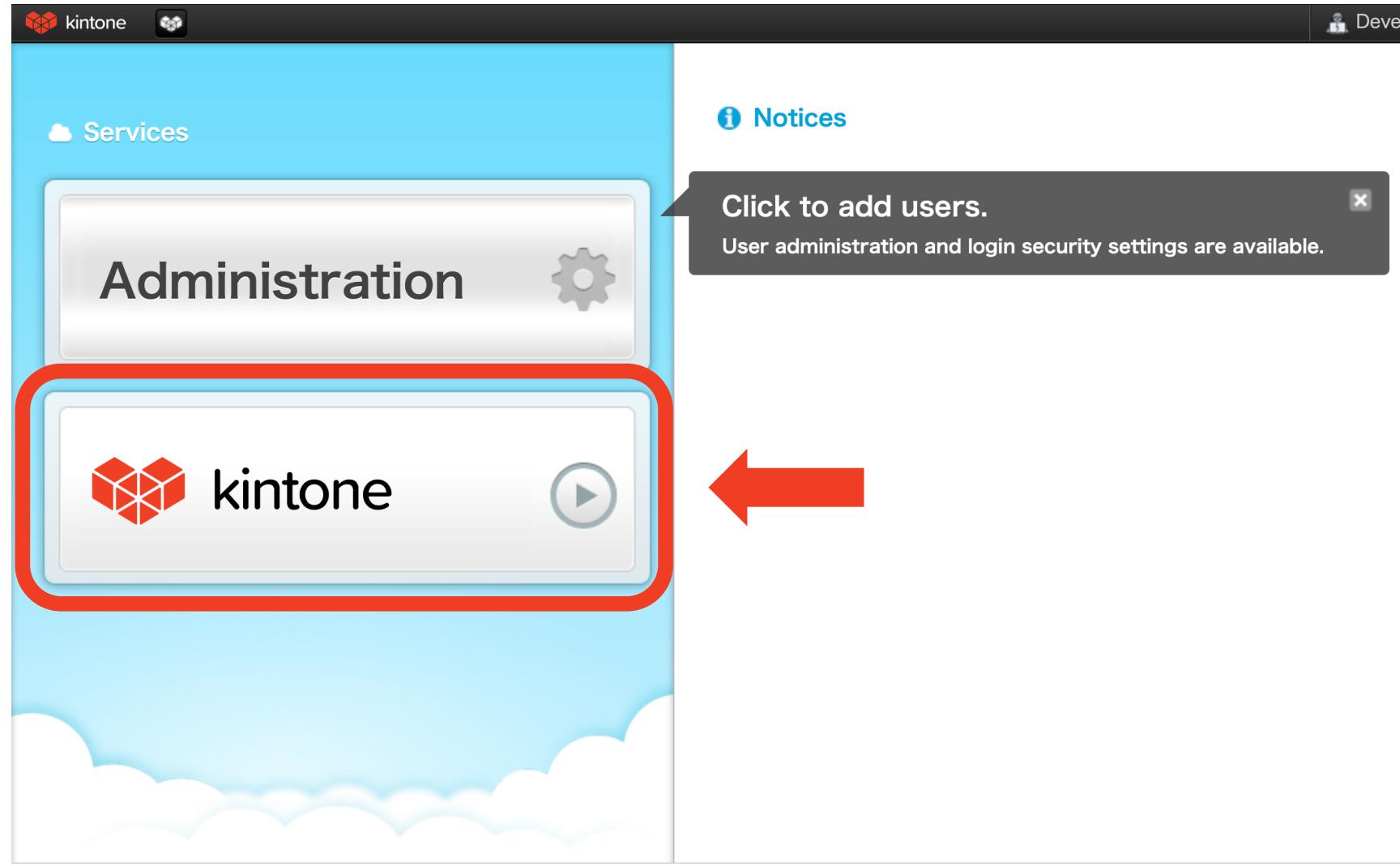
YOUR_SUBDOMAIN.kintone.com

A screenshot of a web browser window with the URL "https://YOUR_SUBDOMAIN.kintone.com/..." in the address bar. The page title is "Set Initial Password". It features two input fields: "New Password" and "Confirm New Password". Below the "New Password" field is a note: "Enter minimum 8 characters, including both letters and numbers." At the bottom right is a blue "Set Password" button.

Let's Log into Kintone

Click on Kintone button on the Left side

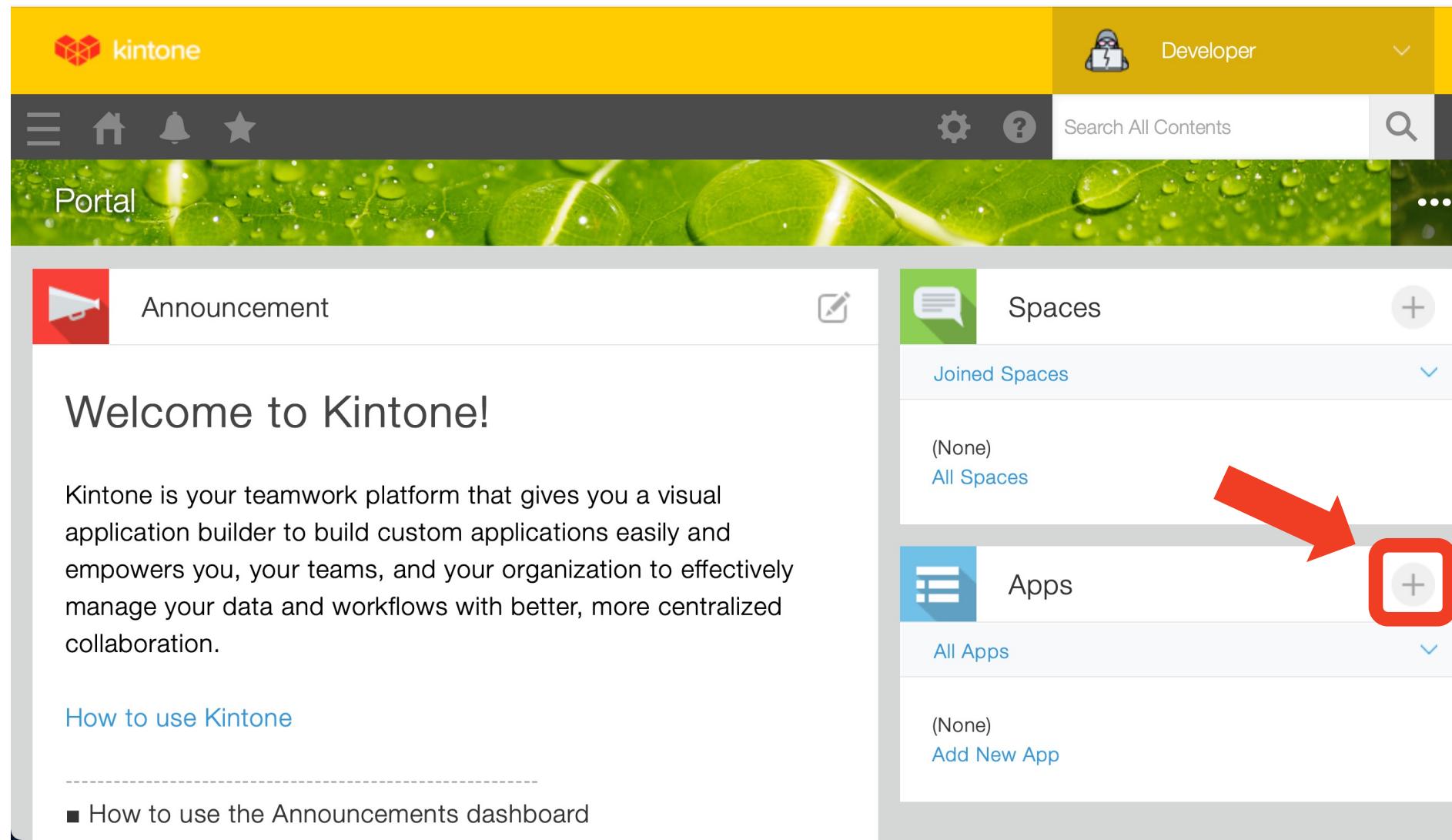
The email has the initial registration link & subdomain



Create a Kintone Database App

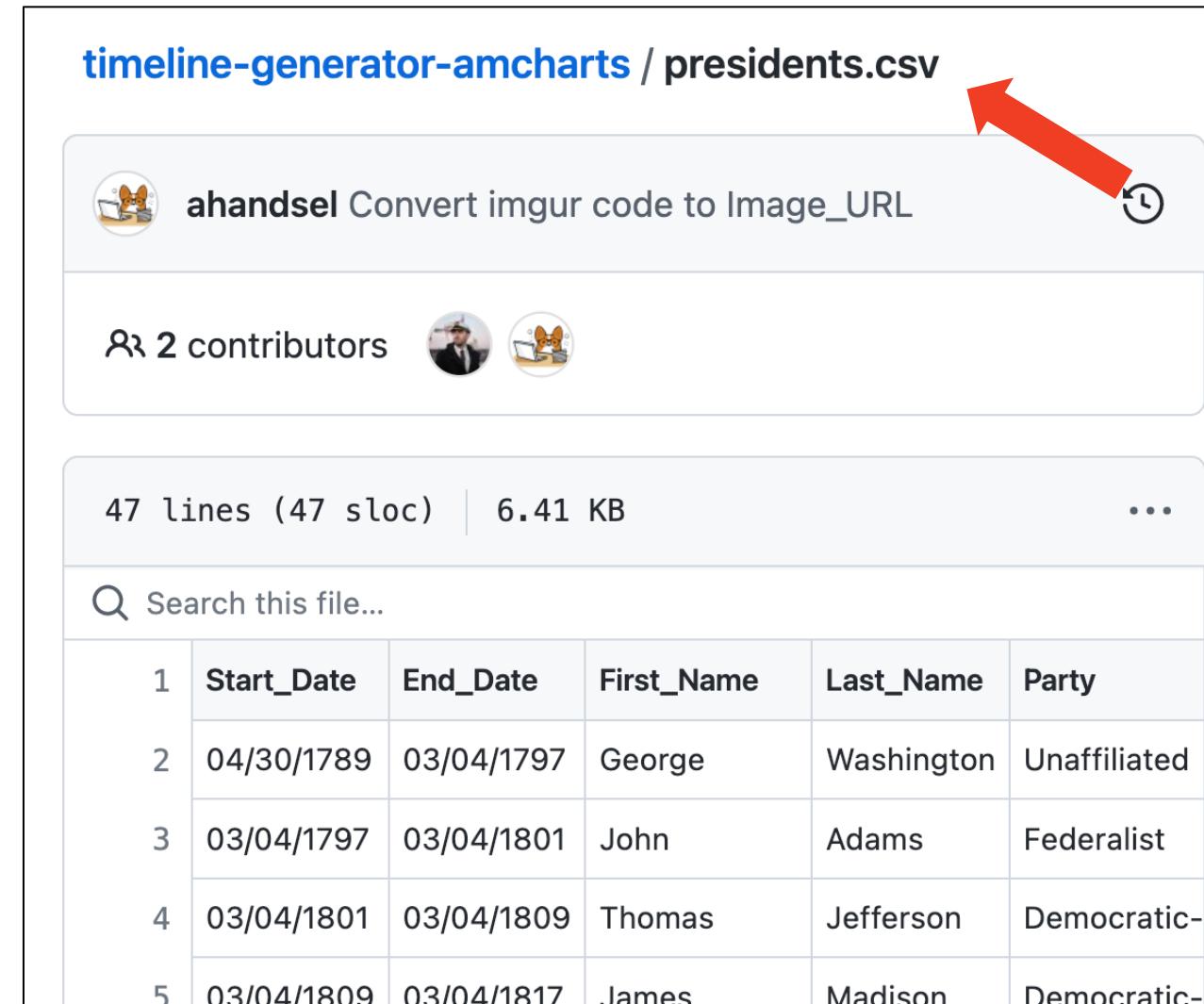
From the
Portal screen

Click the
[+] button
on the
Right side



Create a new Kintone App from a CSV file

1. Grab the [presidents.csv](#) file
2. Select Create from CSV
3. Continue & Upload CSV...



timeline-generator-amcharts / presidents.csv

ahandsel Convert imgur code to Image_URL

2 contributors

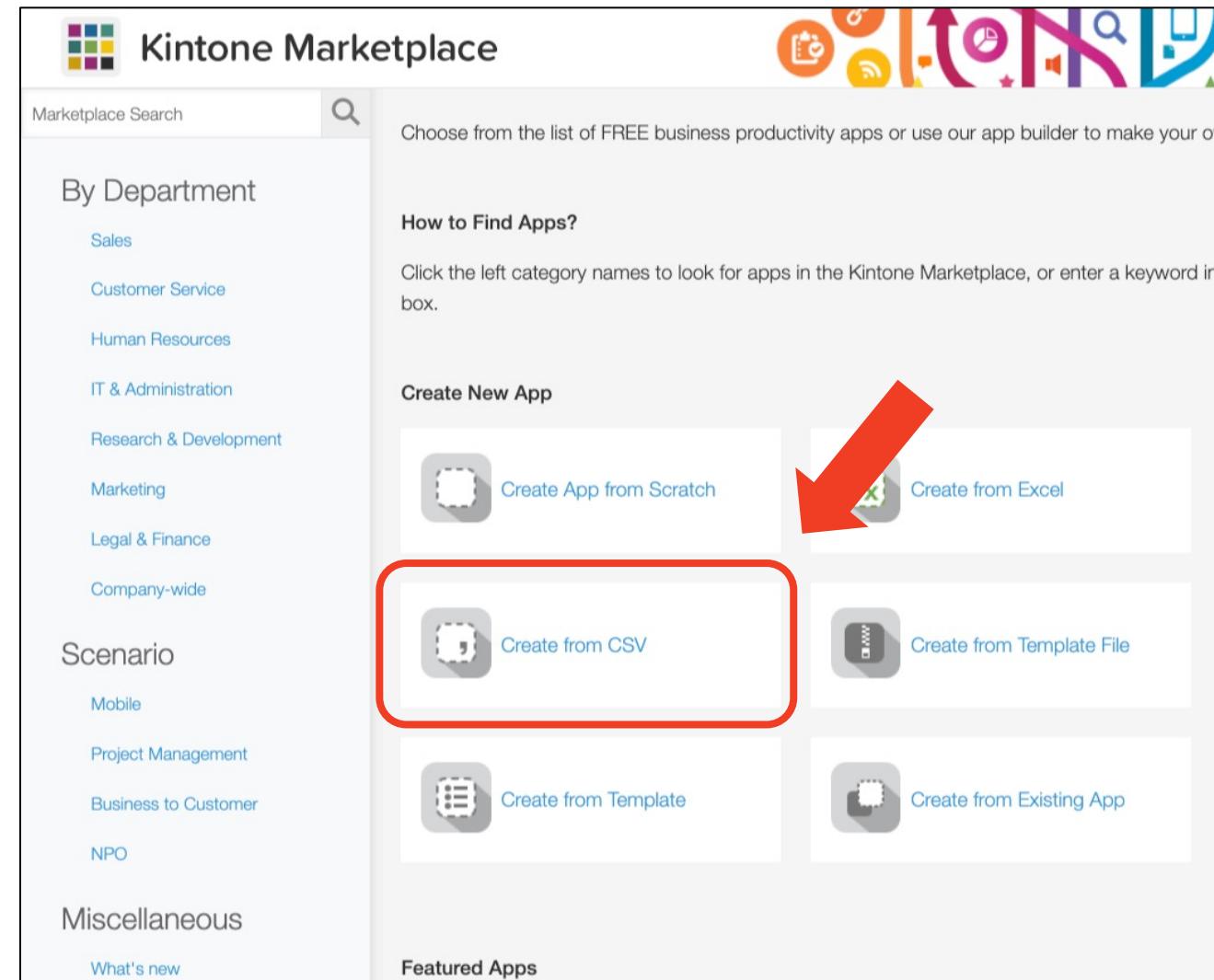
47 lines (47 sloc) | 6.41 KB

Search this file...

1	Start_Date	End_Date	First_Name	Last_Name	Party
2	04/30/1789	03/04/1797	George	Washington	Unaffiliated
3	03/04/1797	03/04/1801	John	Adams	Federalist
4	03/04/1801	03/04/1809	Thomas	Jefferson	Democratic-
5	03/04/1809	03/04/1817	James	Madison	Democratic-

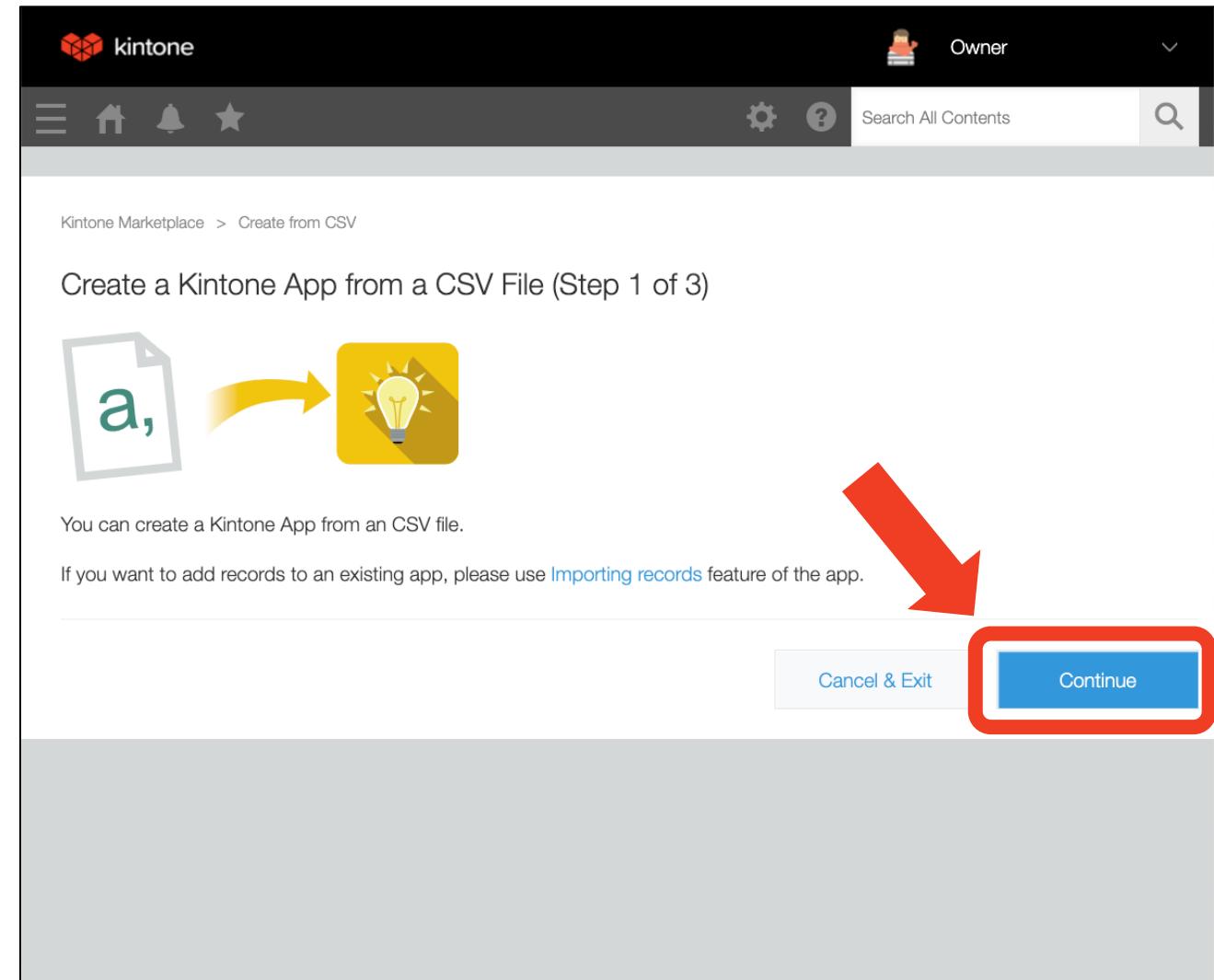
Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...



Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button



Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button

The screenshot shows the 'Create from CSV' step 2 of 3. It includes validation rules for the CSV file and a preview of the data structure.

Validation Rules:

- The first row contains the column names (at least one character, and no more than 128 characters). *
- The number of columns must be 100 or less. *
- The import file must contain no more than 100,000 rows. *
- The file size must be 100 MB or smaller. *

A red arrow points to the "Check all" button, which is highlighted with a red border.

CSV Preview:

	A	B	C	D
1	Contact Date	Department	Name	Age
2	12/01/17	Sales	Chris	35-44
3	12/01/17	Sales	Chris	35-44
4	12/01/17	Sales	Chris	35-44
5	12/01/17	Sales	Chris	35-44
6	12/01/17	Sales	Chris	35-44

Annotations on the right side of the preview area:

- A green bracket labeled "Column name" covers the header row.
- A green bracket labeled "Data (Maximum 100,000 rows)" covers the data rows.
- A green bracket labeled "Maximum 100 columns" covers the columns.

Buttons at the bottom: Cancel & Exit, Back, Continue to the Upload screen.

Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button

Kintone Marketplace > Create from CSV

Prepare a CSV File (Step 2 of 3)

Open the CSV file and format the contents accordingly.

The first row contains the column names (at least one character, and no more than 128 characters). *

The number of columns (items) must be 100 or less. *

The import file contains no more than 100,000 rows. *

The file size must be 100 MB or smaller. *

[Check all](#)

Please refer to the [help](#) for details about how to prepare CSV files.

Column name

	A	B	C	D
1	Contact Date	Department	Name	Age
2	12/01/17	Sales	Chris	35-44
3	12/01/17	Sales	Chris	35-44
4	12/01/17	Sales	Chris	35-44
5	12/01/17	Sales	Chris	35-44
6	12/01/17	Sales	Chris	35-44

Data (Maximum 100,000 rows)

Maximum 100 columns

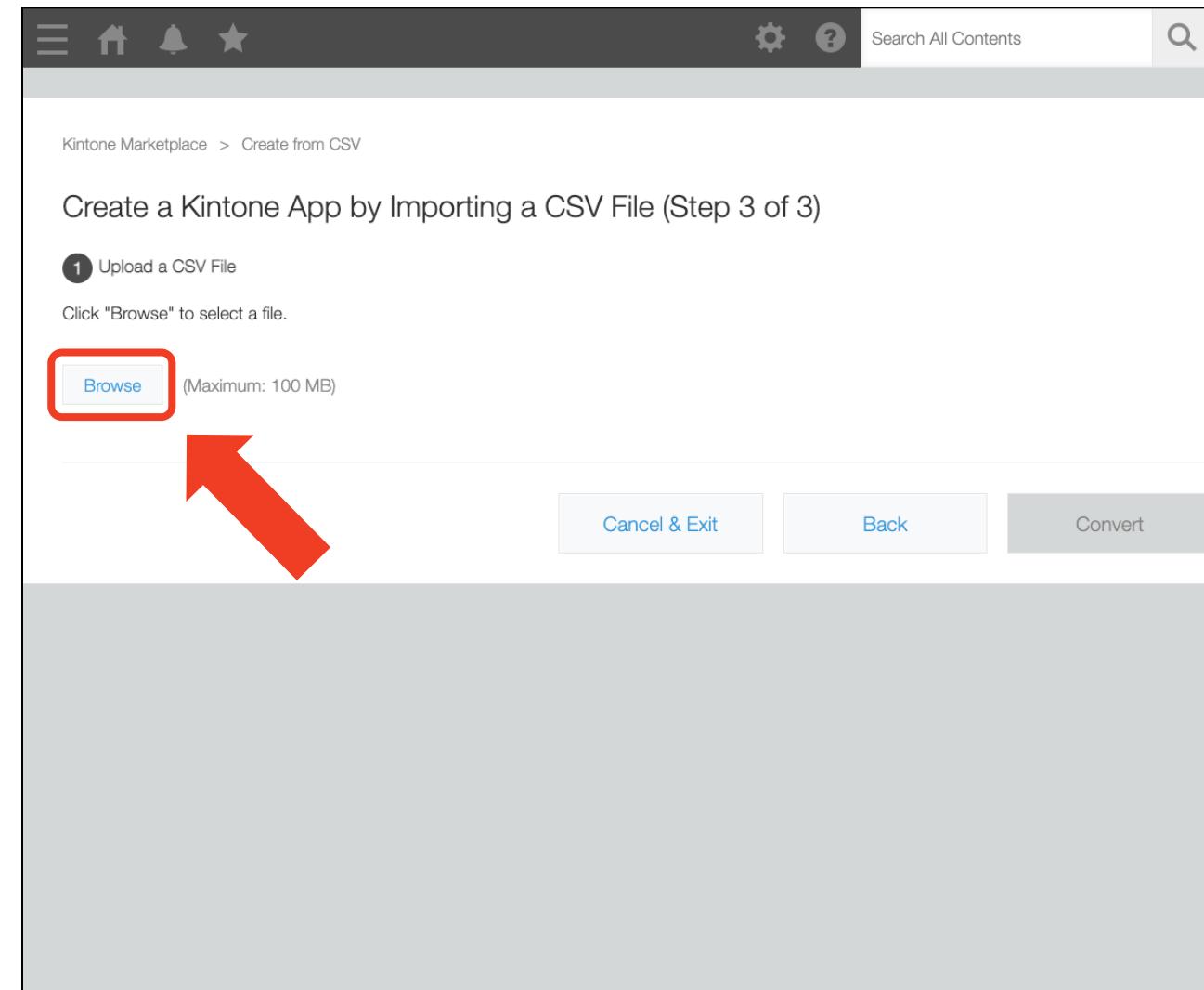
Cancel & Exit

Back

Continue to the Upload screen

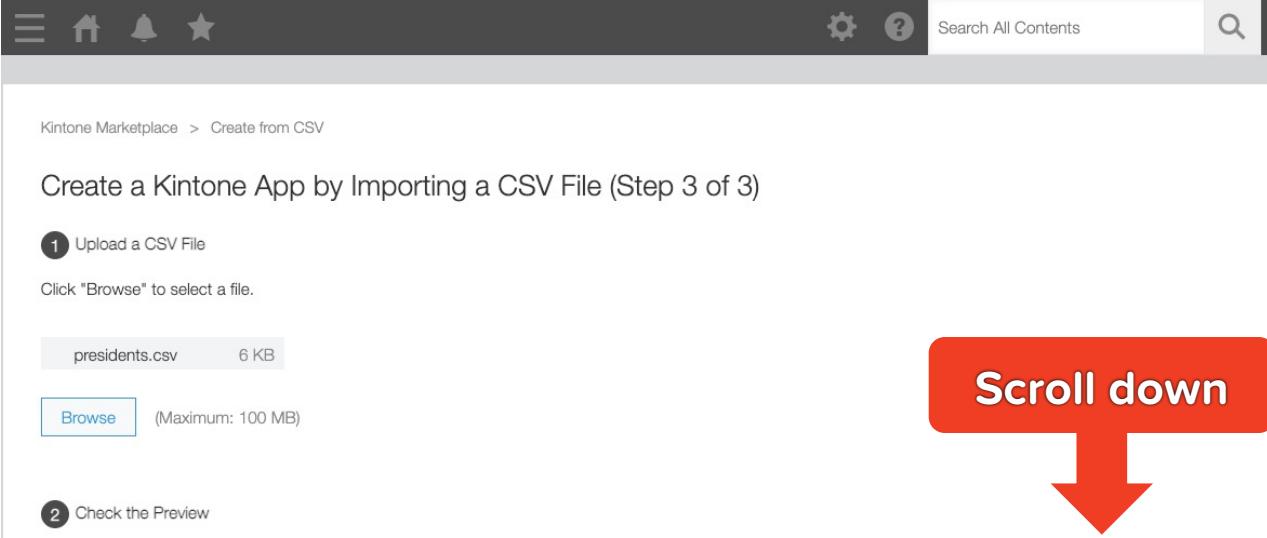
Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button



Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button



Kintone Marketplace > Create from CSV

Create a Kintone App by Importing a CSV File (Step 3 of 3)

1 Upload a CSV File

Click "Browse" to select a file.

presidents.csv 6 KB

Browse (Maximum: 100 MB)

2 Check the Preview

The table below shows the preview of the App with your data.
Ensure that the first row of the preview table (top-most row with white background) shows the column names. Partial sample data is shown in the second row and after.

Total Records: 46 Character Encoding: English (Latin1) Delimiter: Comma

Start_Date	End_Date	First_Name	Last_Name	Party	Wiki_URL	Image_UF
04/30/1789	03/04/1797	George	Washington	Unaffiliated	https://en.wikipedia.org/wiki/Presidency_of_George_Washington	https://i.imgur.com/1.png
03/04/1797	03/04/1801	John	Adams	Federalist	https://en.wikipedia.org/wiki/Presidency_of_John_Adams	https://i.imgur.com/2.png
03/04/1801	03/04/1809	Thomas	Jefferson	Democratic-Republican	https://en.wikipedia.org/wiki/Presidency_of_Thomas_Jefferson	https://i.imgur.com/3.png
03/04/1809	03/04/1817	James	Madison	Democratic-Republican	https://en.wikipedia.org/wiki/Presidency_of_James_Madison	https://i.imgur.com/4.png
03/04/1817	03/04/1825	James	Monroe	Democratic-Republican	https://en.wikipedia.org/wiki/Presidency_of_James_Monroe	https://i.imgur.com/5.png

Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button

03/04/1817 | 03/04/1825 | James | Monroe | Democratic-Republican | https://en.wikipedia.org/wiki/Presidency_of_James_Monroe | <https://i.imgur.com>

3 Start Converting to an App

Set a field type for each column, then click "Convert" button at the bottom of the screen. However, field type settings are not mandatory, because Kintone has automatically selected recommended field types.

Field Name (Column Name)	Field Type
Start_Date	Date MM/DD/YYYY (12/31/2023)
End_Date	Date MM/DD/YYYY (12/31/2023)
First_Name	Text
Last_Name	Text
Party	Text
Wiki_URL	Link to (URL)
Image_URL	Link to (URL)

A red arrow points to the "Party" field, which is highlighted with a red box. The "Text" field type dropdown is also highlighted with a red box.

Cancel & Exit | Back | Convert

Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button

03/04/1809 03/04/1817 James Madison Democratic-Republican https://en.wikipedia.org/wiki/Residency_of_James_Madison https://i.imgur.com

03/04/1817 03/04/1825 James Monroe Democratic-Republican https://en.wikipedia.org/wiki/Presidency_of_James_Monroe https://i.imgur.com

③ Start Converting to an App

Set a field type for each column, then click "Convert" button at the bottom of the screen.
However, field type settings are not mandatory, because Kintone has automatically selected recommended field types.

Field Name (Column Name)	Type
Start_Date	Text
End_Date	Drop-down
First_Name	Text
Last_Name	Text
Party	Text
Wiki_URL	Link to (URL)
Image_URL	Link to (URL)

A red box highlights the dropdown menu for the "End_Date" field, which is set to "Drop-down". A red arrow points to the "Drop-down" option in the list. The "Text" option is also visible in the list.

Cancel & Exit Back Convert

Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button

03/04/1809	03/04/1817	James	Madison	Democratic-Republican	https://en.wikipedia.org/wiki/Presidency_of_James_Madison	https://i.imgur.com/1234567890.jpg
03/04/1817	03/04/1825	James	Monroe	Democratic-Republican	https://en.wikipedia.org/wiki/Presidency_of_James_Monroe	https://i.imgur.com/1234567891.jpg

③ Start Converting to an App

Set a field type for each column, then click "Convert" button at the bottom of the screen.
However, field type settings are not mandatory, because Kintone has automatically selected recommended field types.

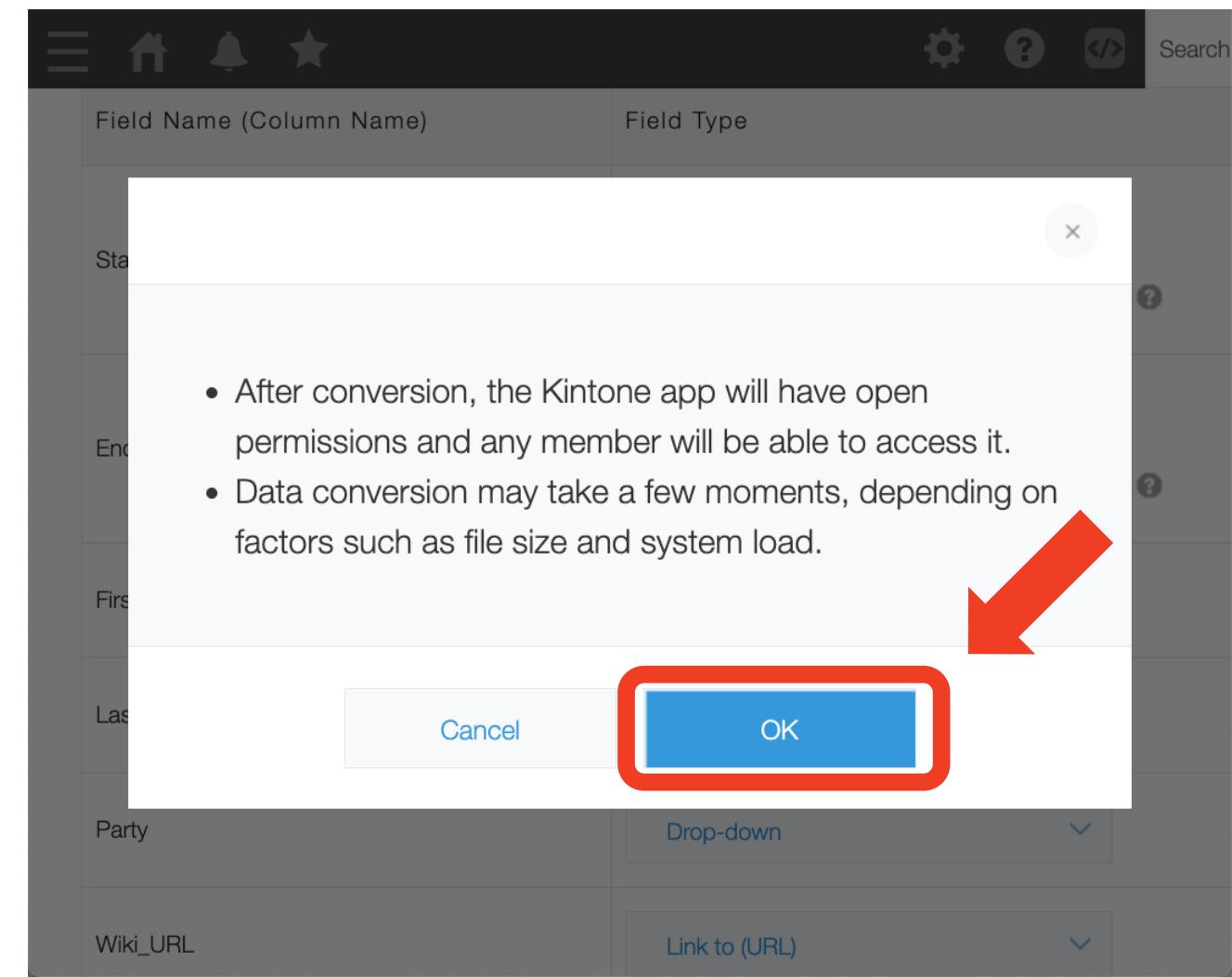
Field Name (Column Name)	Field Type
Start_Date	Date MM/DD/YYYY (12/31/2023)
End_Date	Date MM/DD/YYYY (12/31/2023)
First_Name	Text
Last_Name	Text
Party	Drop-down
Wiki_URL	Link to (URL)
Image_URL	Link to (URL)



Cancel & Exit Back Convert

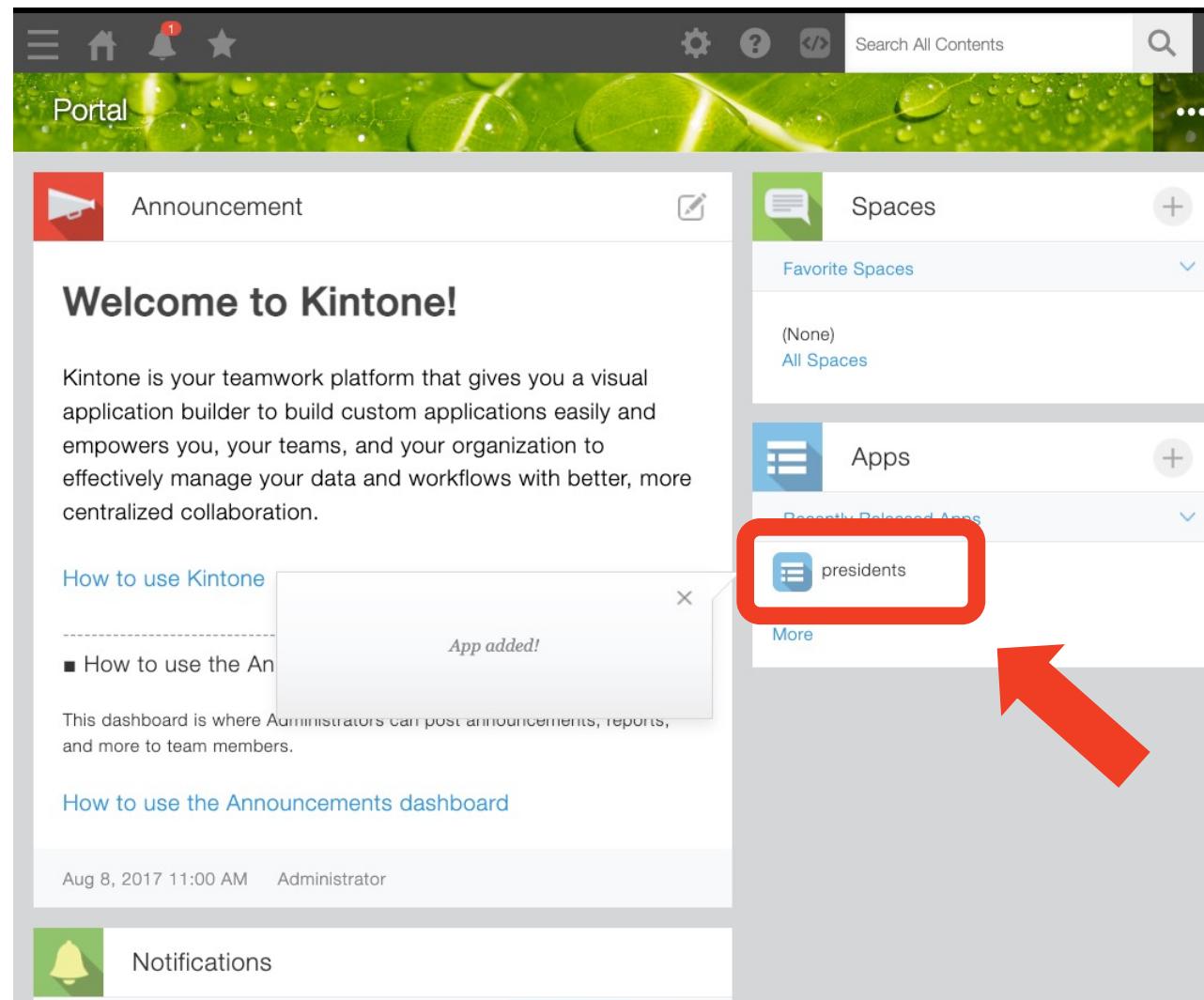
Create a new Kintone App from a CSV file

1. Grab the presidents.csv file
2. Select Create from CSV
3. Continue & Upload CSV...
 - Continue & Check all buttons
 - Continue to the Upload button
 - Upload the CSV file
 - Edit settings
 - Convert button



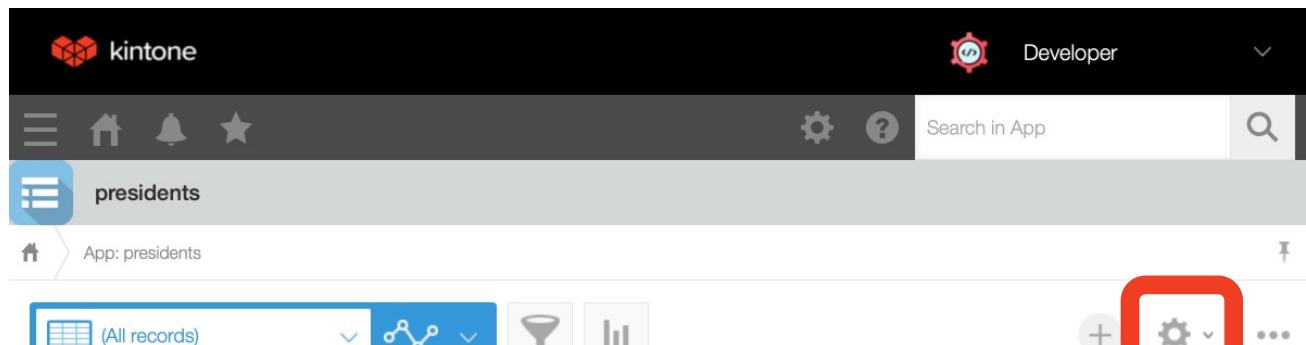
Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App



Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App

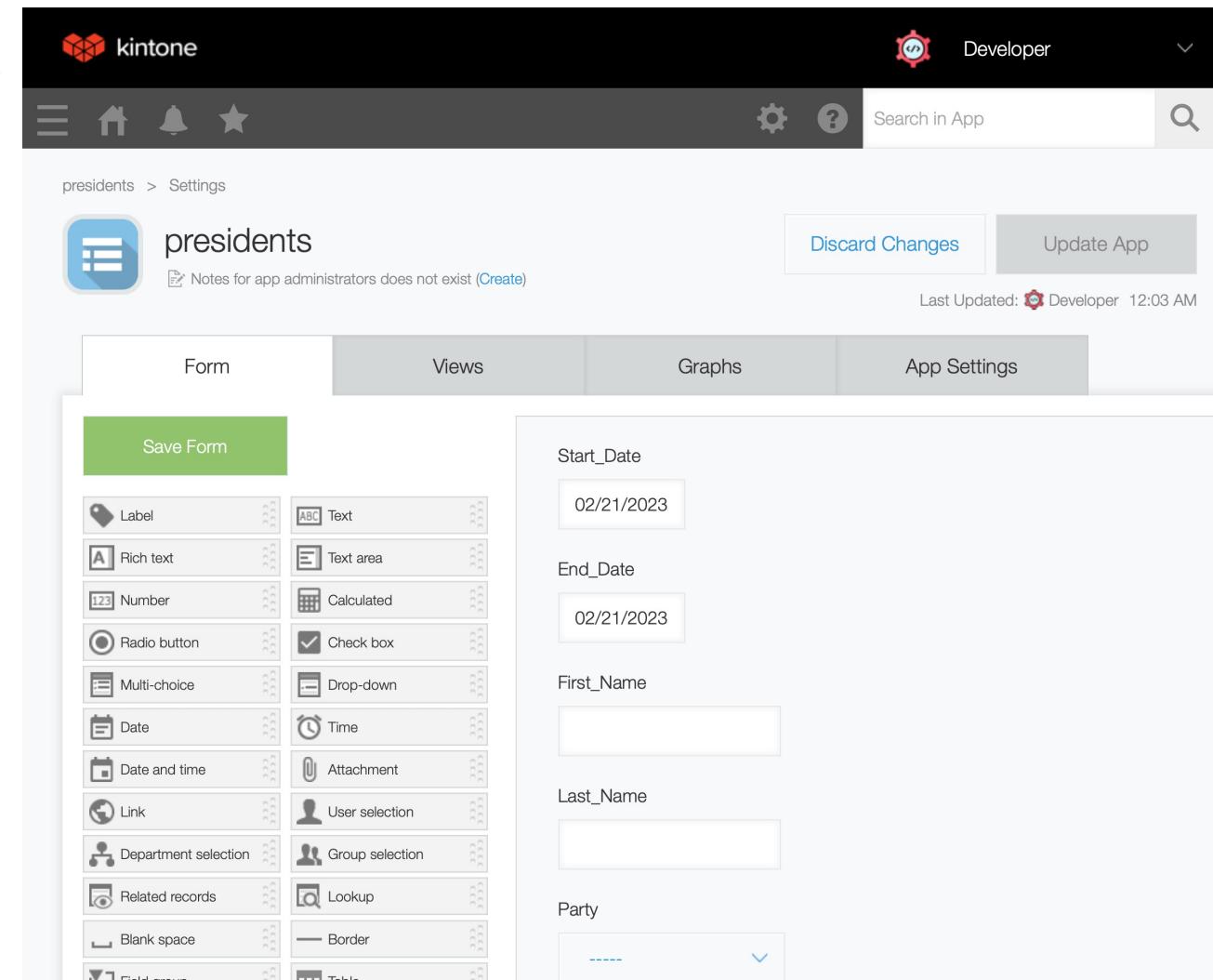


The screenshot shows the Kintone application interface for the "presidents" app. The top navigation bar includes the Kintone logo, developer mode, search, and other standard icons. Below the header, the app name "presidents" is displayed along with its path "App: presidents". The main area features a table with columns for Record number, Start Date, End Date, First Name, Last Name, Party, Wiki URL, and Image. The first few rows of data are visible, including records for Biden, Trump, Obama, Bush, George, Clinton, Bush, Reagan, Carter, and Jimmy. The bottom right corner of the table area shows a message "Records 1 - 20 of 46". The top right corner of the table has a settings gear icon, which is highlighted with a red box and a red arrow pointing to it.

Record number	Start Date	End Date	First Name	Last Name	Party	Wiki URL	Image
46	Jan 20, 2021	Jan 20, 2025	Joe	Biden	Democratic	https://example.com/biden	
45	Jan 20, 2017	Jan 20, 2021	Donald	Trump	Republican	https://example.com/trump	
44	Jan 20, 2009	Jan 20, 2017	Barack	Obama	Democratic	https://example.com/obama	
43	Jan 20, 2001	Jan 20, 2009	George	Bush	Republican	https://example.com/bush	
42	Jan 20, 1993	Jan 20, 2001	Bill	Clinton	Democratic	https://example.com/clinton	
41	Jan 20, 1989	Jan 20, 1993	George	Bush	Republican	https://example.com/bush	
40	Jan 20, 1981	Jan 20, 1989	Ronald	Reagan	Republican	https://example.com/reagan	
39	Jan 20, 1977	Jan 20, 1981	Jimmy	Carter	Democratic	https://example.com/carter	

Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App



Configure the Kintone App

How to set the Field Codes

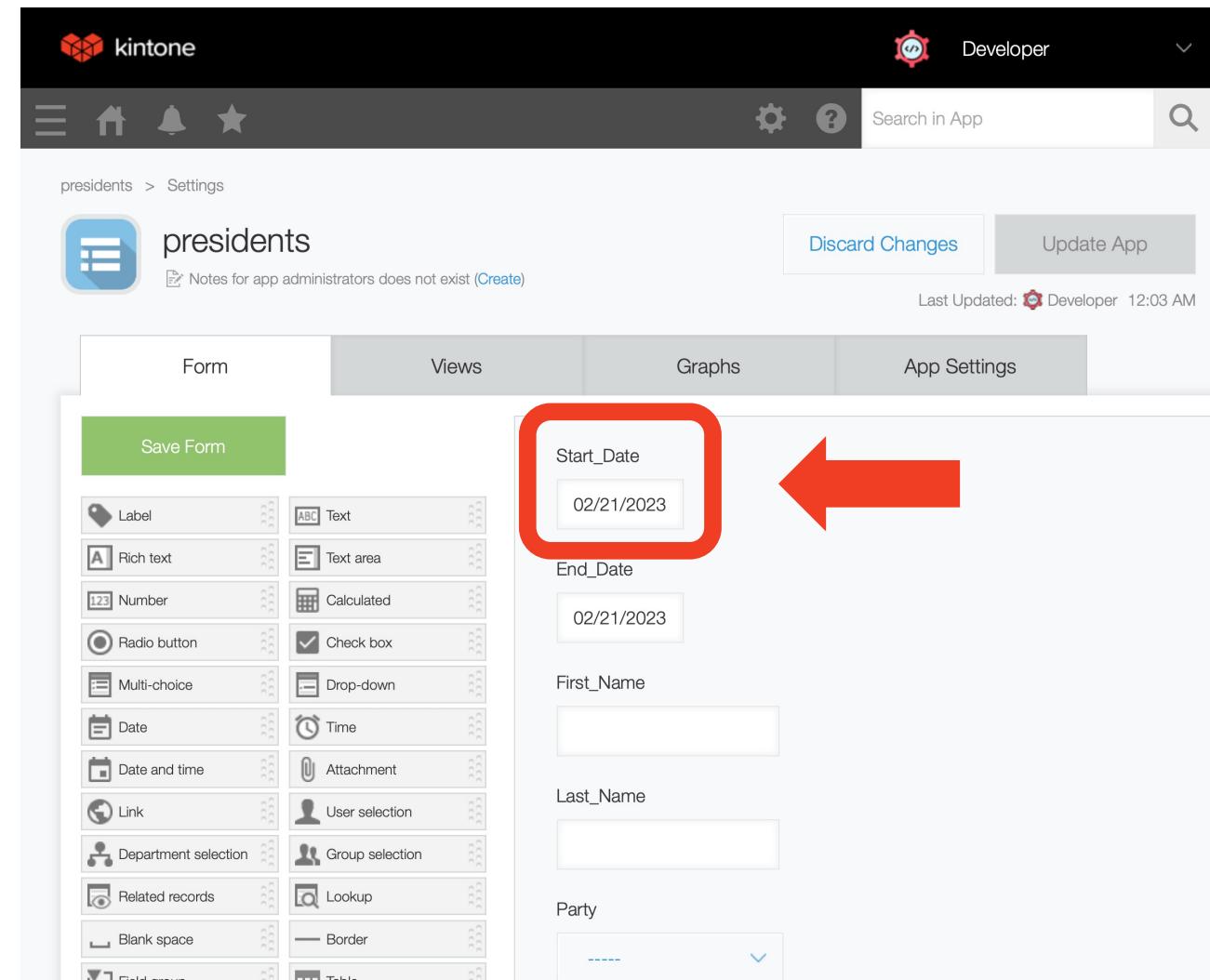
1. Hover over the field
2. Click the top right gear 
3. Select **Settings**
4. Click the edit button 
5. Enter the new field code
6. Click Save

⚠️ Field Codes are Case-Sensitive ⚠️

Fields	Field Codes
Start_Date	start
End_Date	end
First_name	first
Last_Name	last
Party	party
Wiki_URL	wiki
Image_URL	image

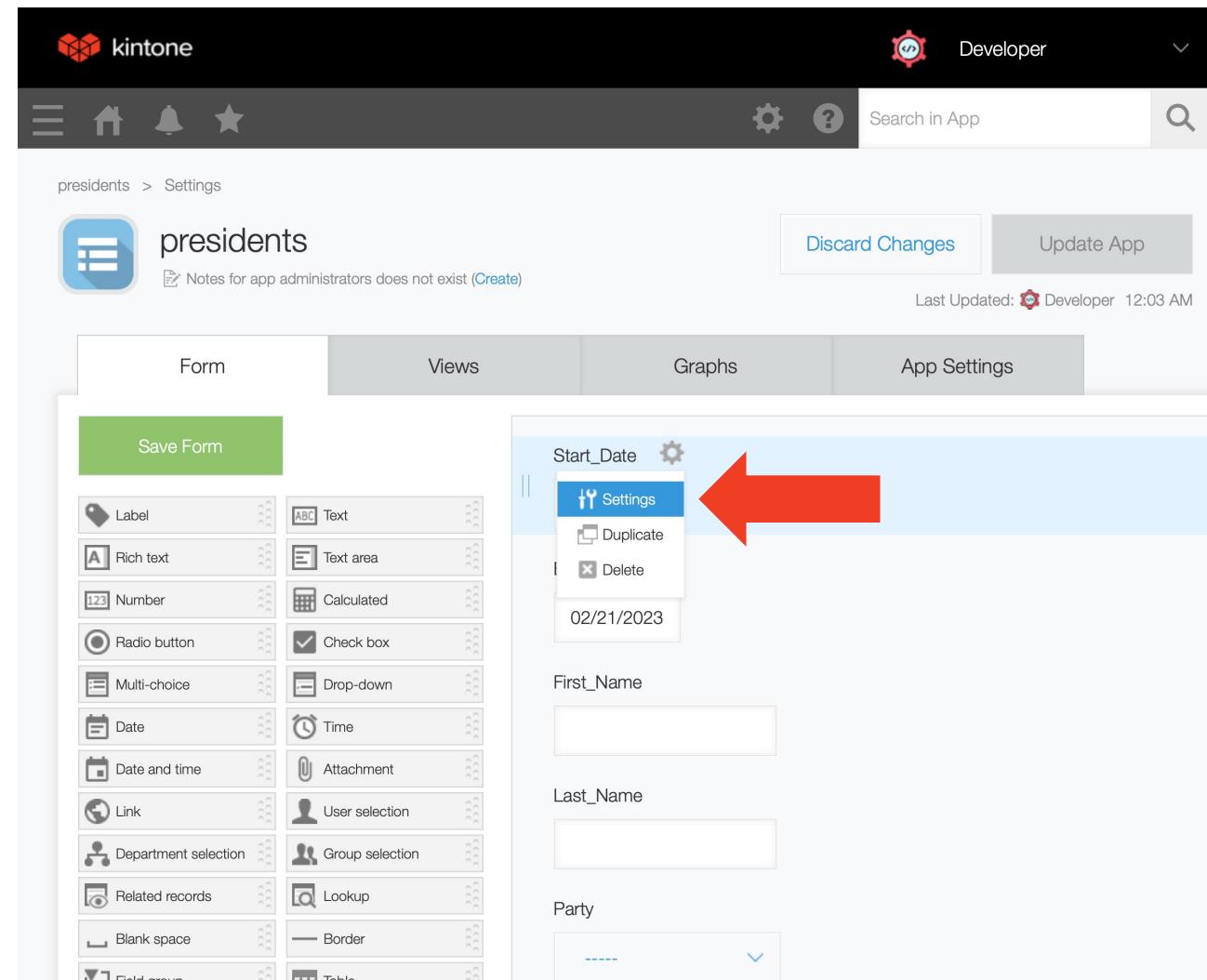
Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App



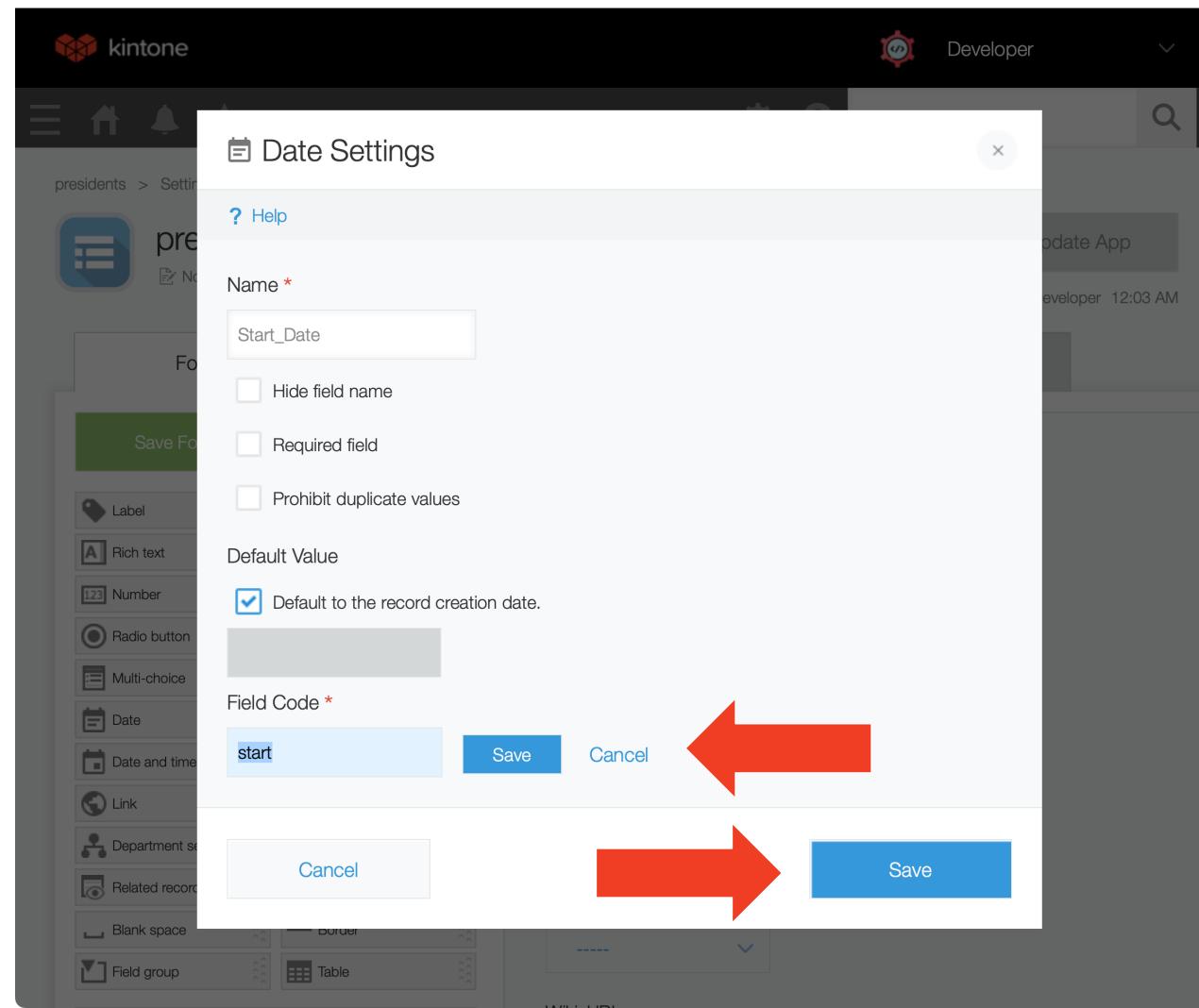
Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App



Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App



Configure the Kintone App

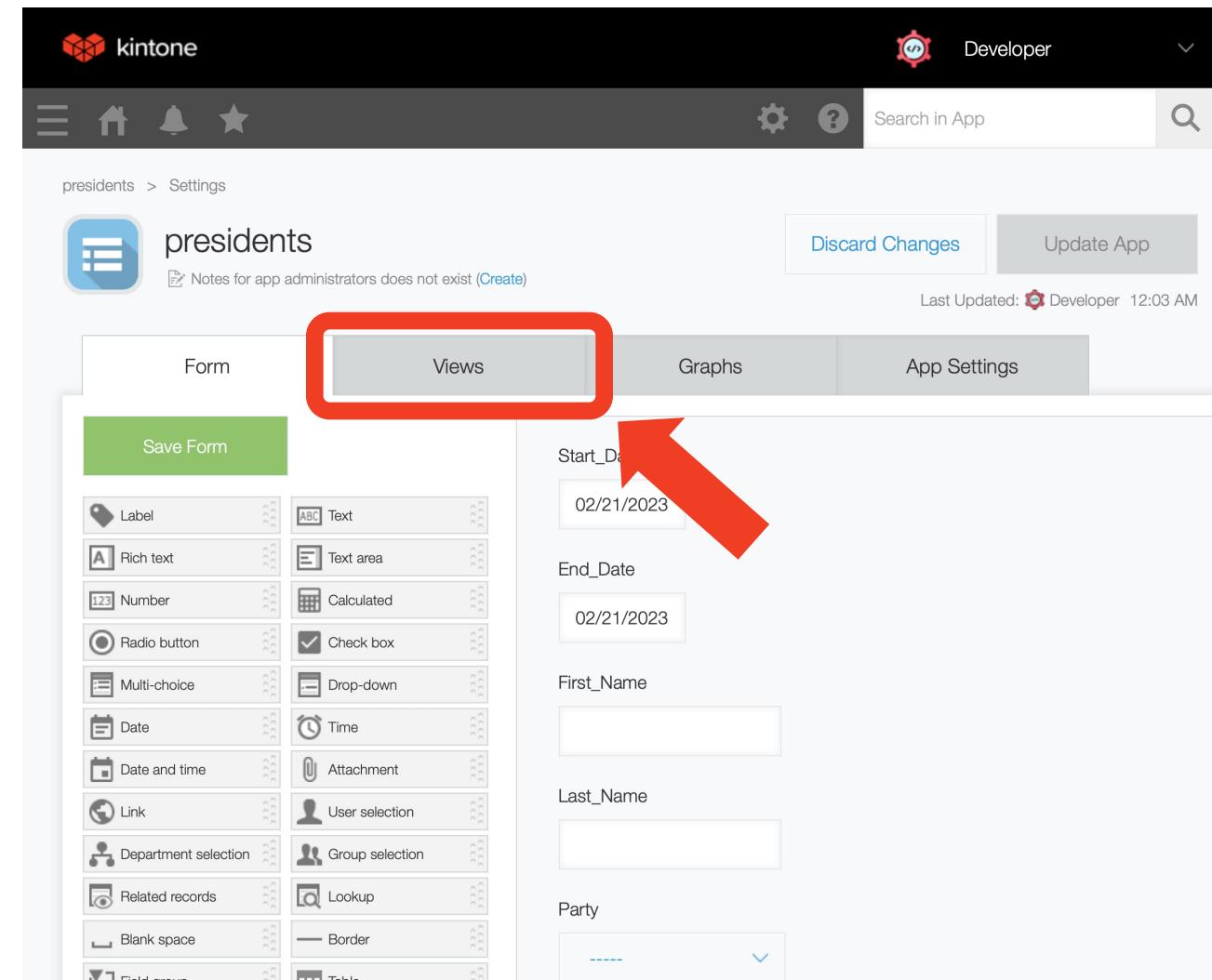
Repeat the steps for
all the fields

⚠ Field Codes are
Case-Sensitive

Fields	Field Codes
Start_Date	start
End_Date	end
First_name	first
Last_Name	last
Party	party
Wiki_URL	wiki
Image_URL	image

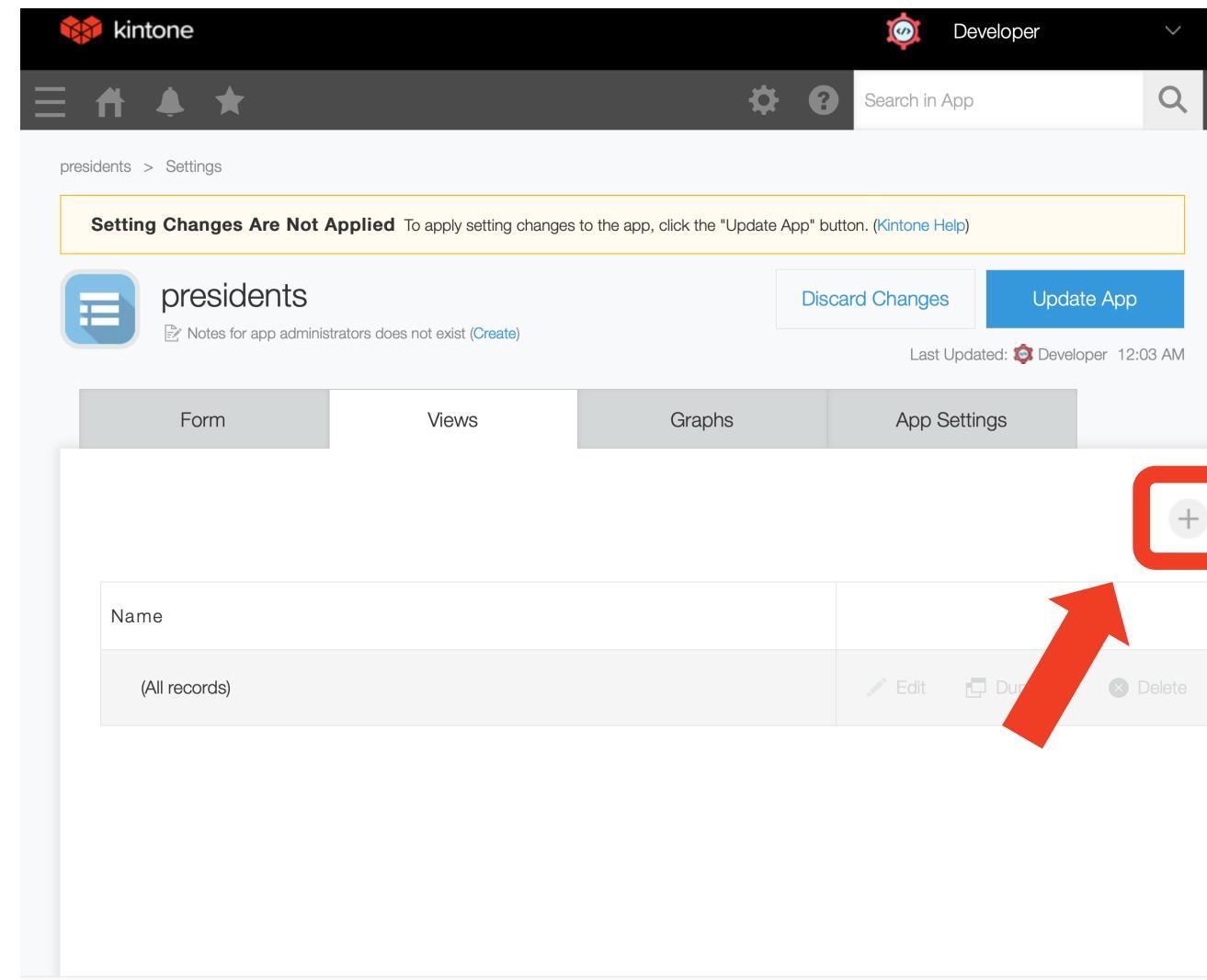
Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
 1. Select Views setting tab
4. Update App



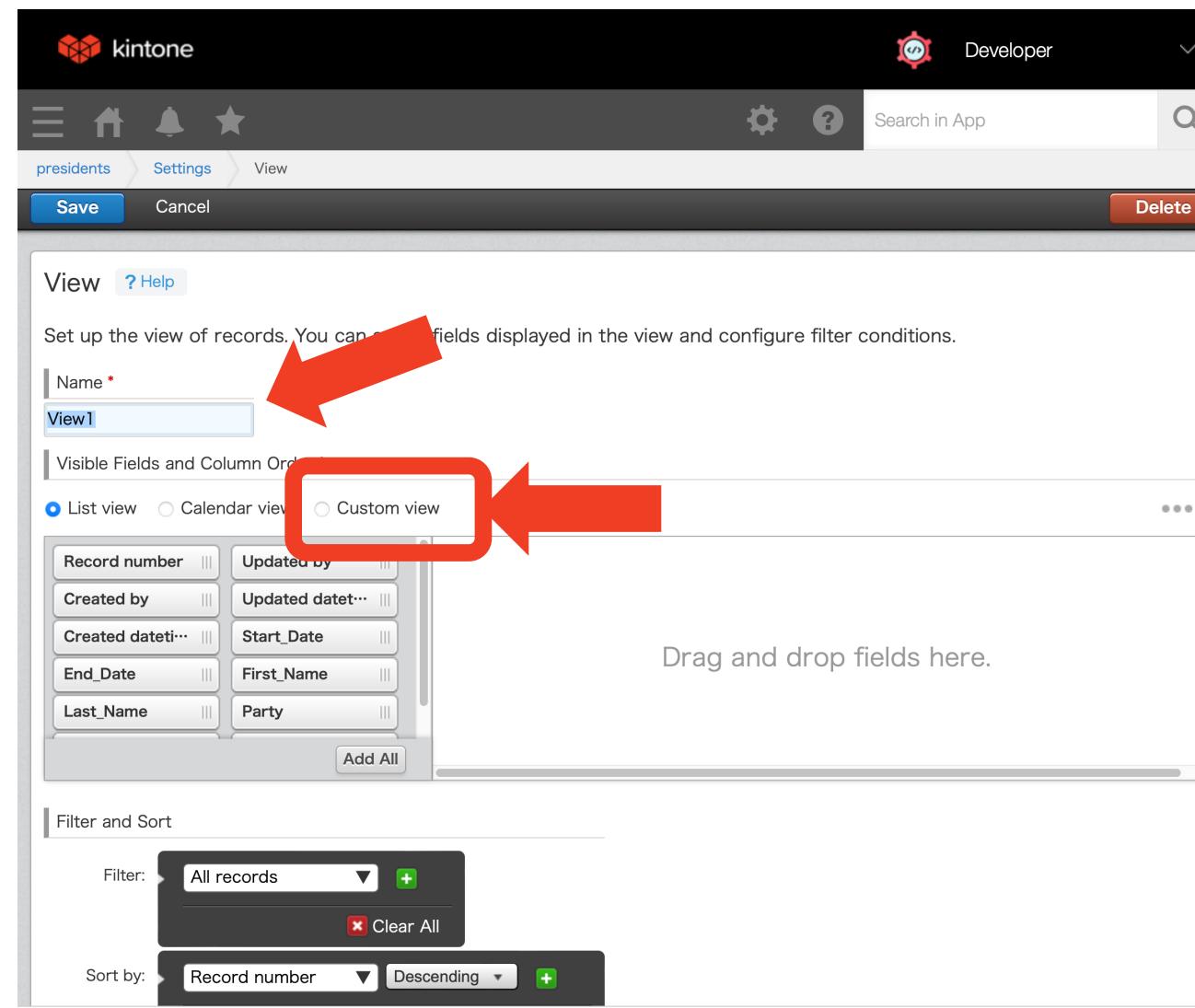
Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
 1. Click on \oplus button
4. Update App



Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
 1. Name the view
 2. Set view to Custom view
4. Update App



Configure the Kintone App

1. Open the new App's Settings

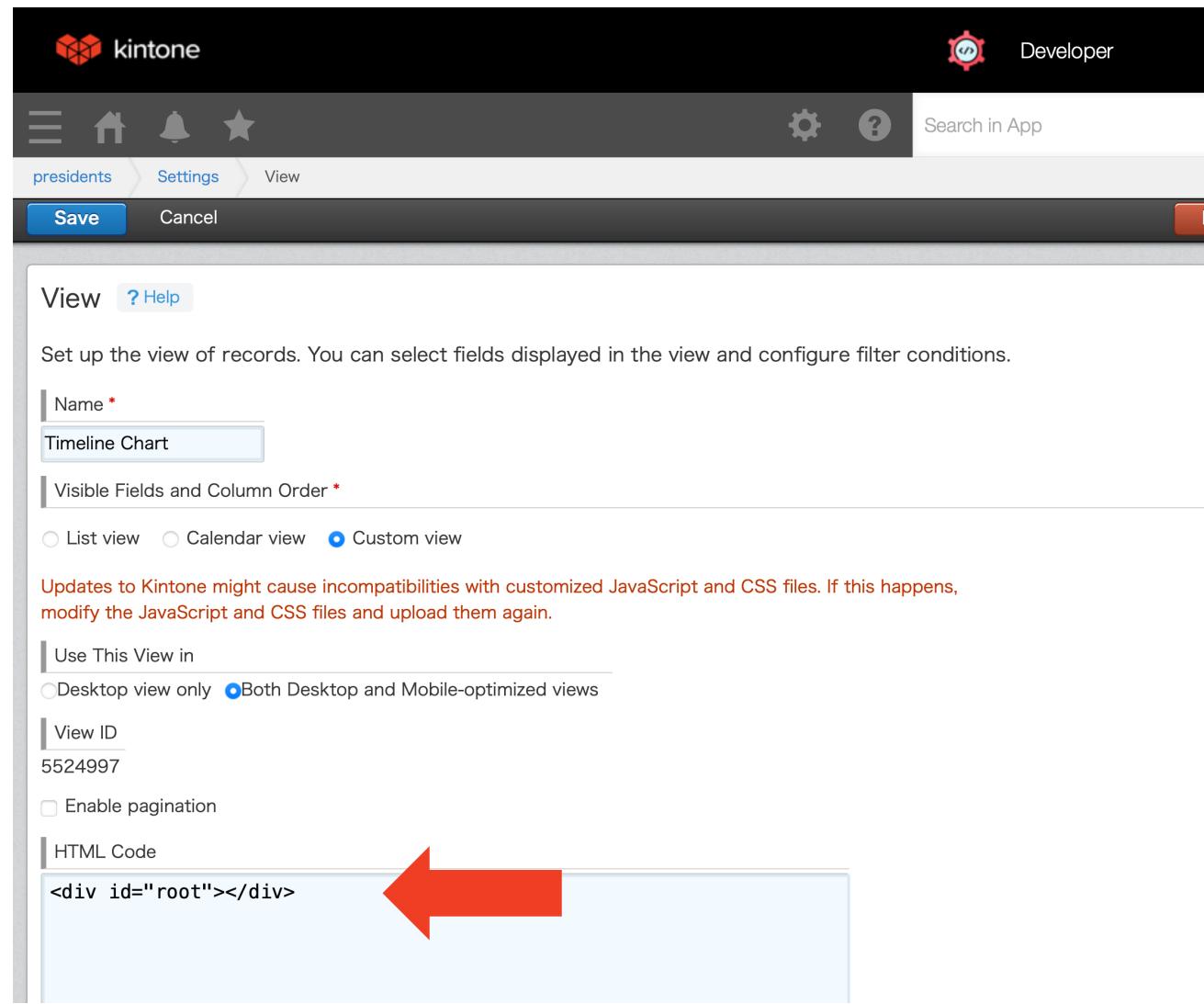
2. Set field codes

3. Create Custom View

1. HTML Code field:

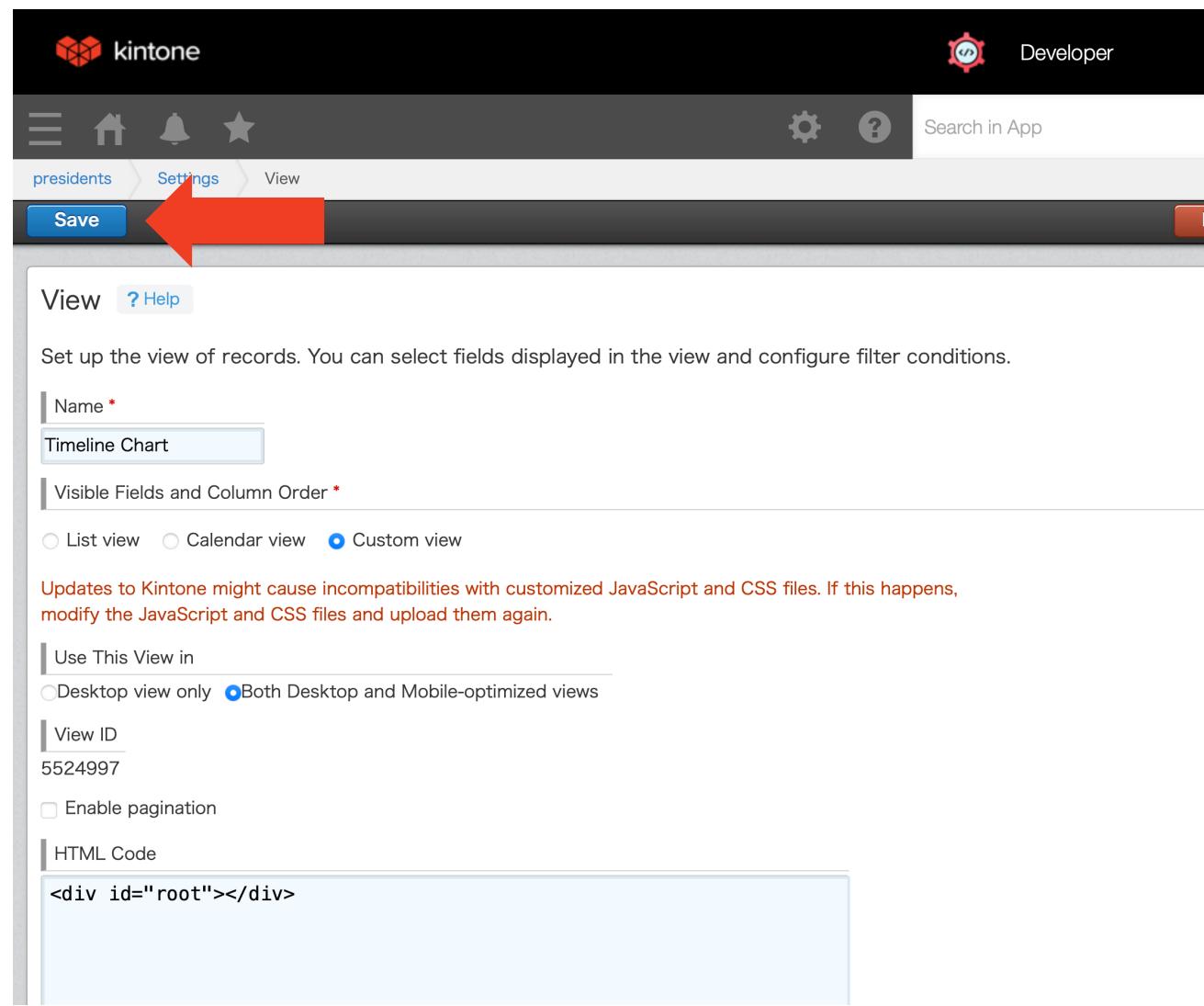
```
<div id="root"></div>
```

4. Update App



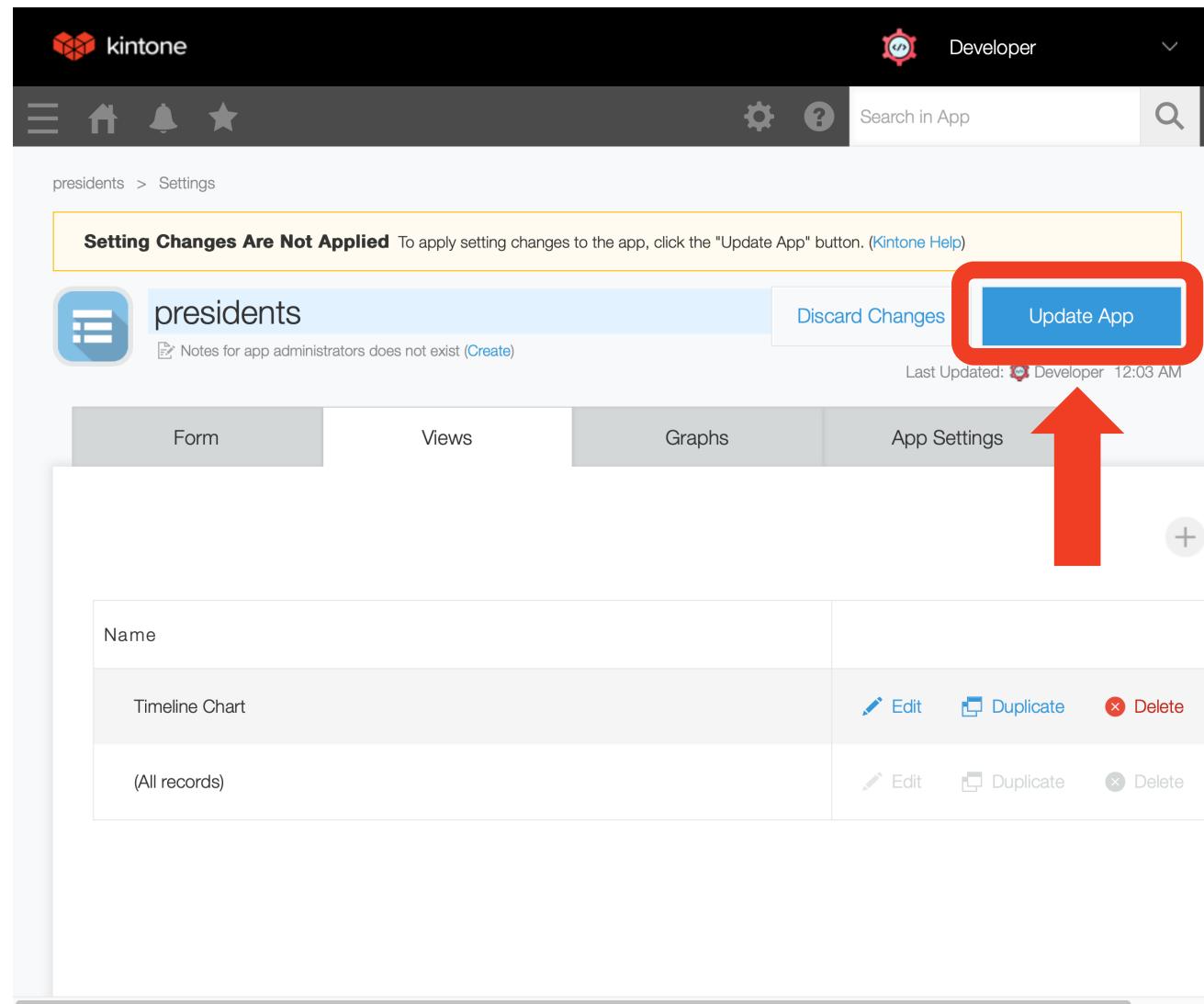
Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App



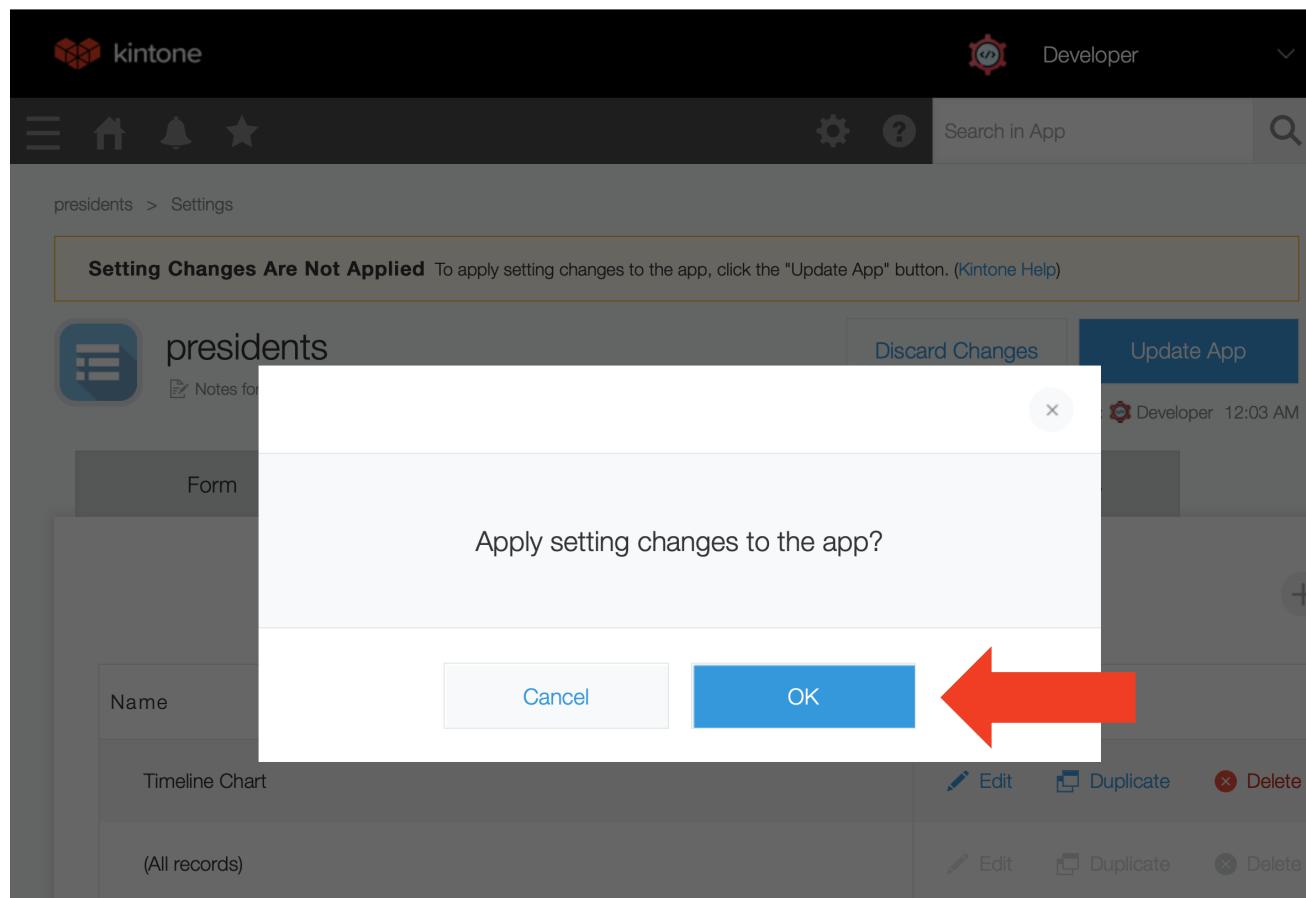
Configure the Kintone App

1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App



Configure the Kintone App

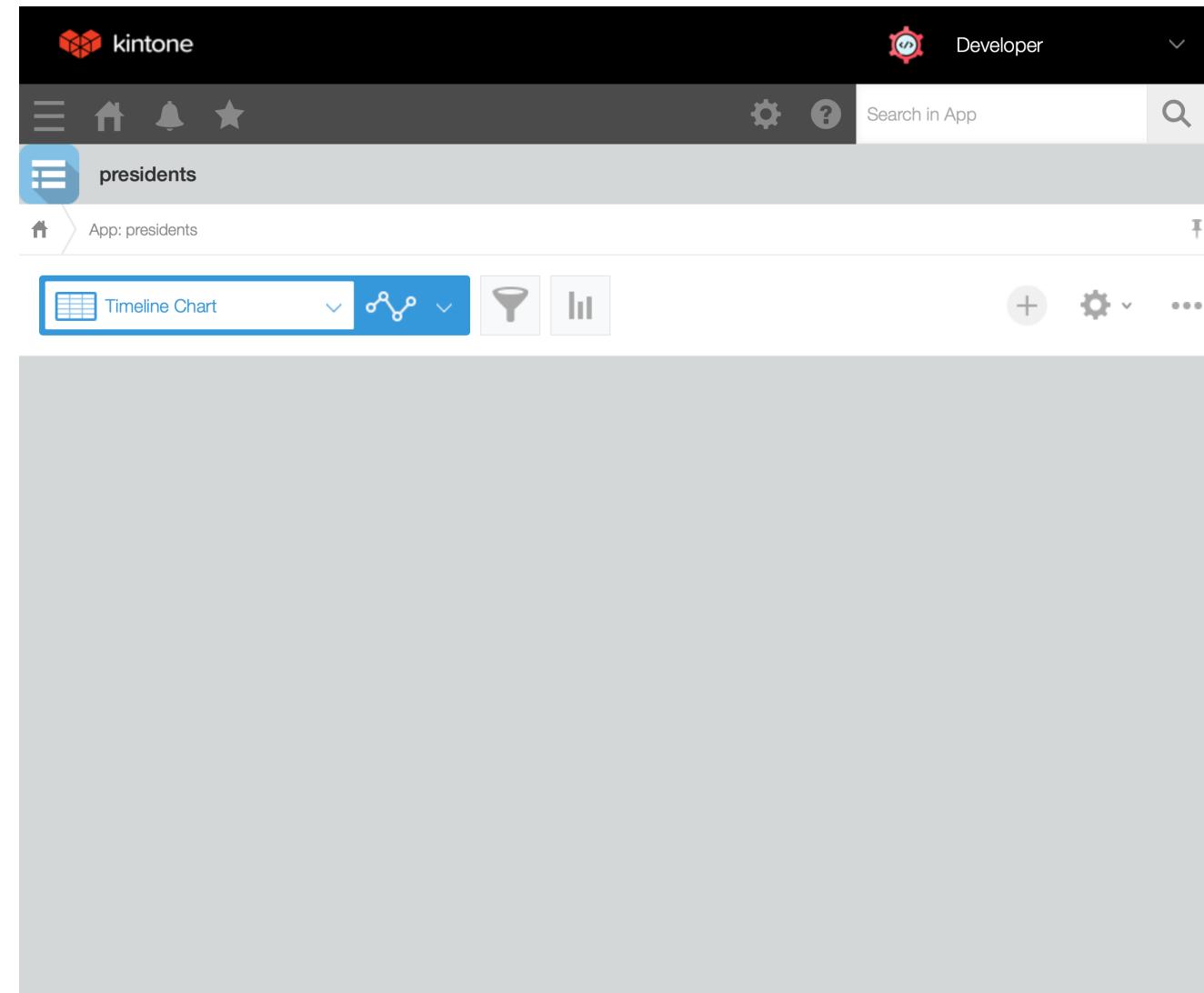
1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App



Configure the Kintone App

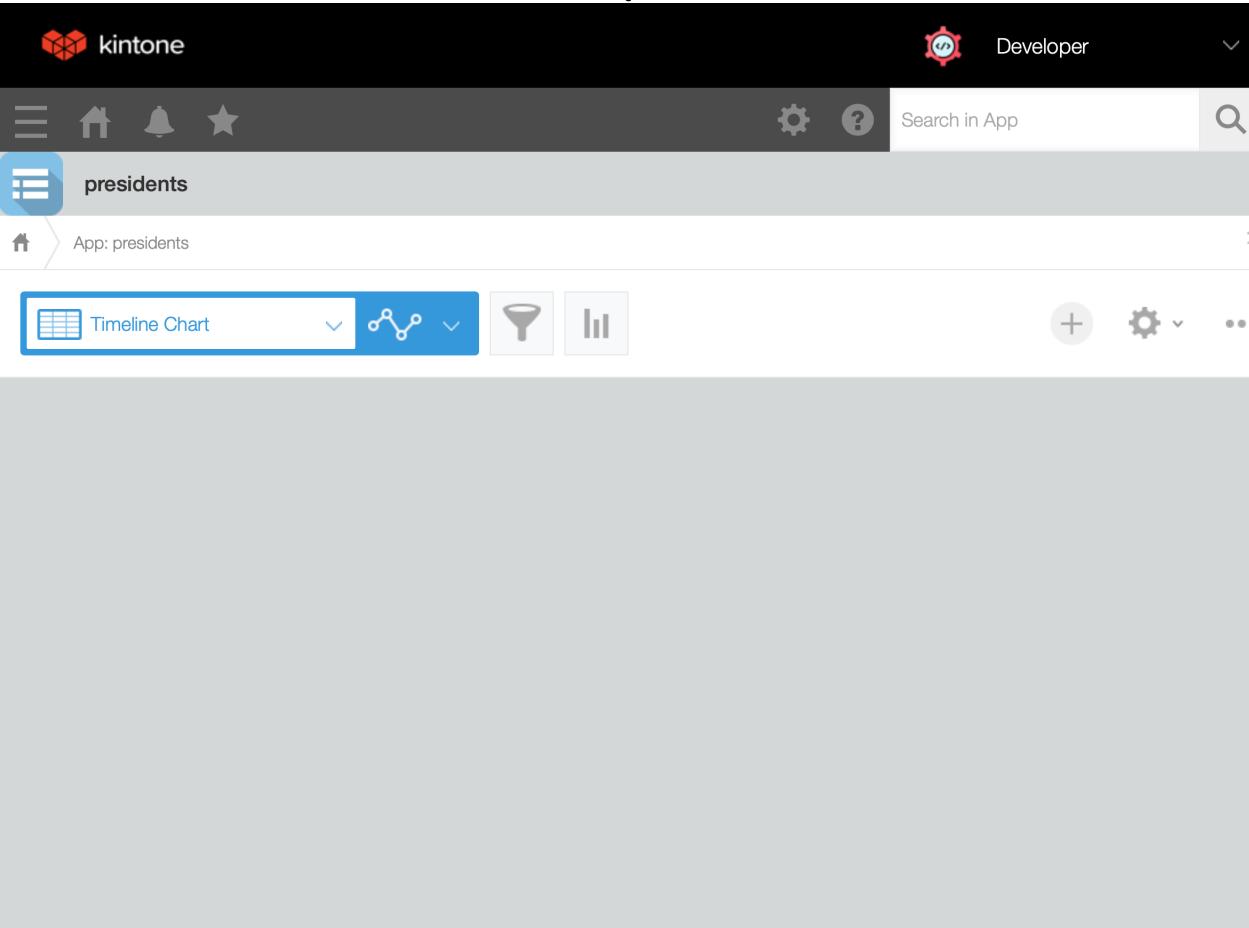
1. Open the new App's Settings
2. Set field codes
3. Create Custom View
4. Update App

You got a
Presidents Database App! 🎉

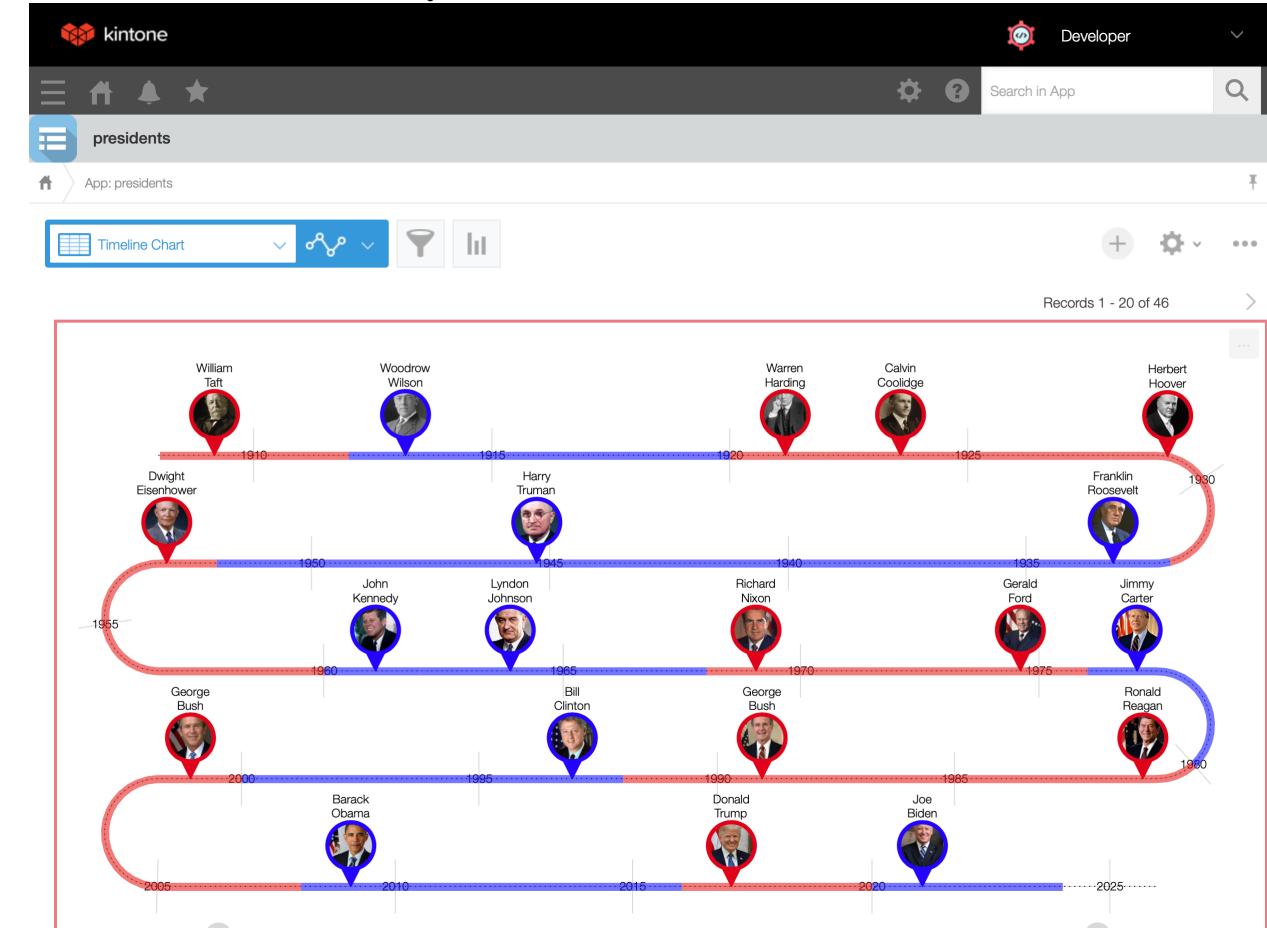


Need to finish the code & Upload

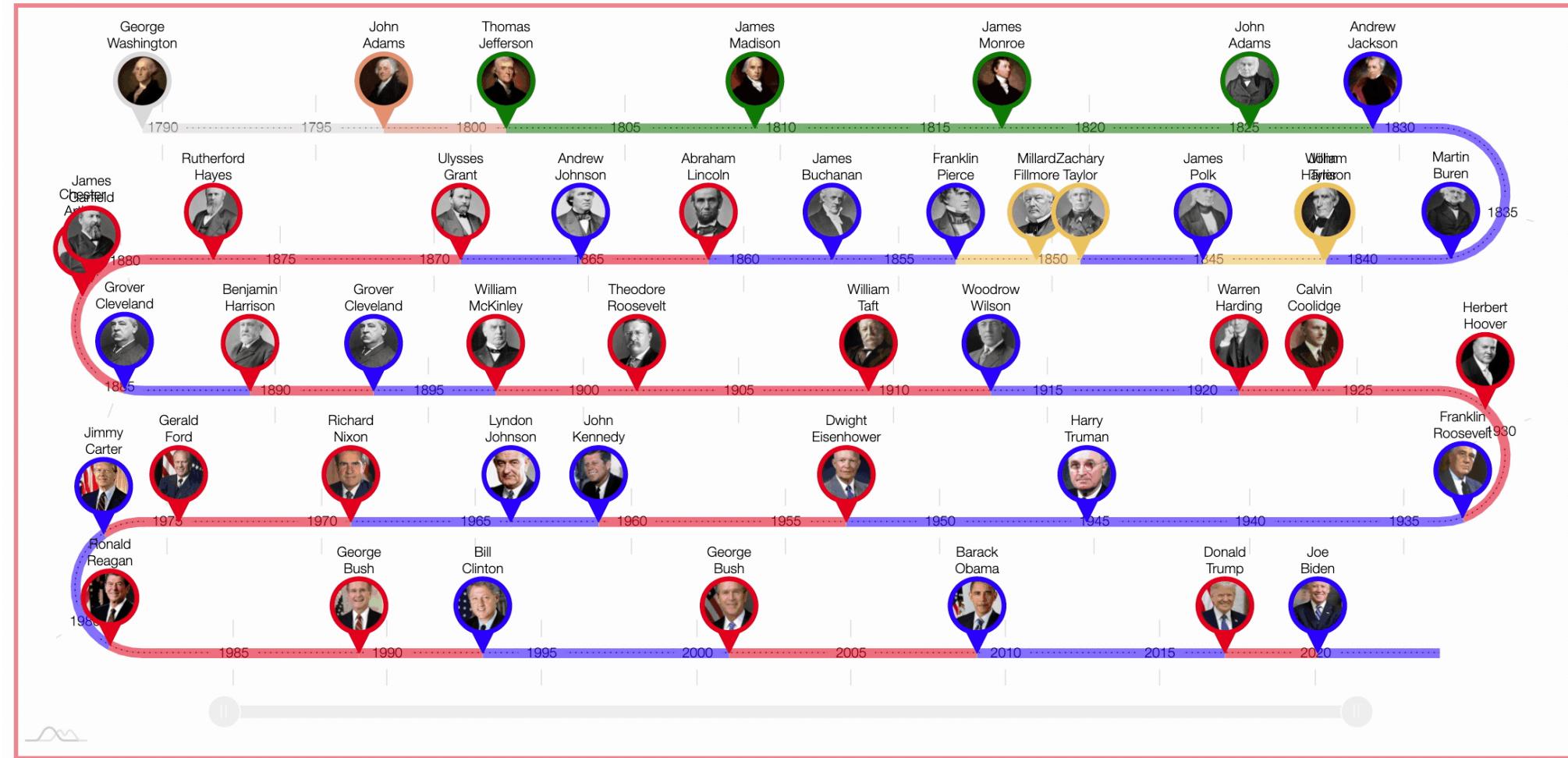
Before Code Upload



After Code Upload



Results

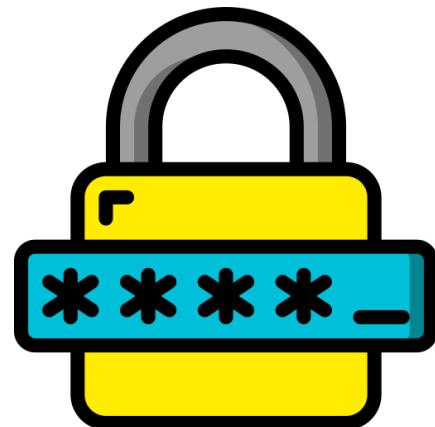


Connect Kintone to the Project

1. Kintone Subdomain

2. App ID

3. Custom View ID



Go inside the `.env.example` file

`.env.example` file is used to verify that `.env` file is correctly configured

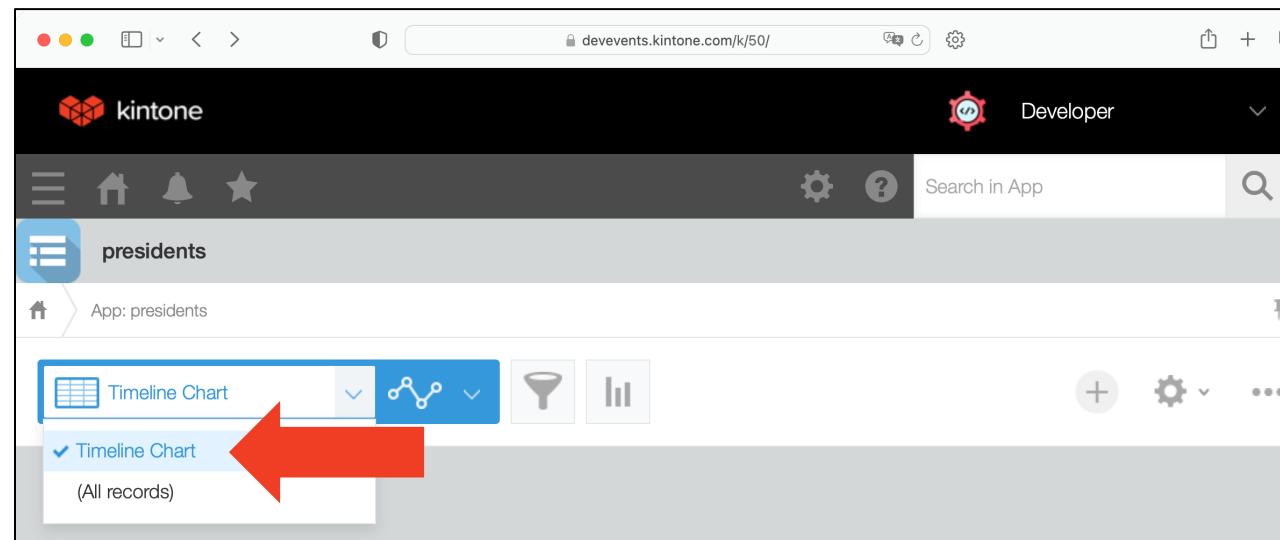
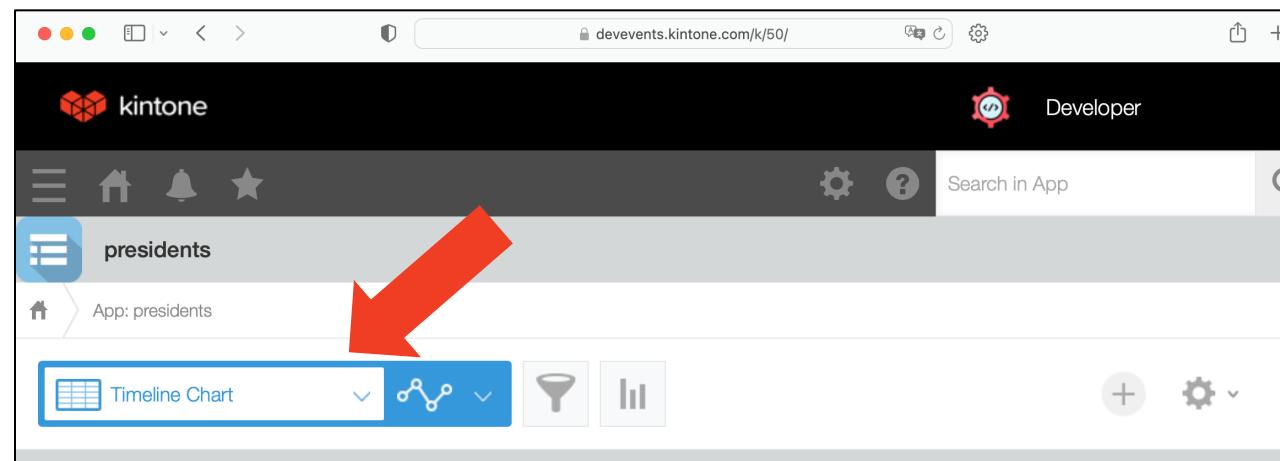
Duplicate this file & name it "`.env`"

```
KINTONE_BASE_URL="https://example.kintone.com"  
KINTONE_USERNAME="your_username"  
KINTONE_PASSWORD="your_password"  
VIEW_ID="1234"
```

Get the View ID & App ID

Click the View dropdown

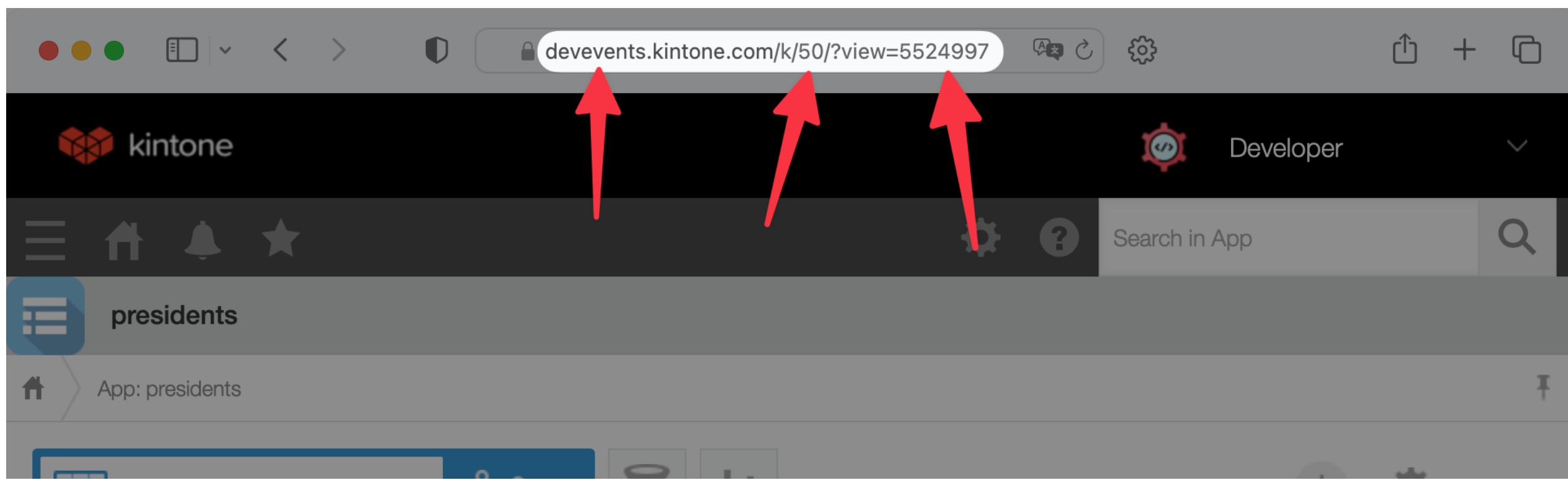
Then re-select
the Custom View



Get the View ID & App ID

Grab the URL – It has all the required information

Subdomain (devevents), App ID (50), and View ID (5524997)



Do not see all the presidents?

Set the # per page setting to 60 so amCharts

The screenshot shows a kintone application interface with a dark theme. At the top, there's a navigation bar with the kintone logo, developer tools, and search functions. Below the header, the app title is "presidents" and the view is "App: presidents". The main area features a "Timeline Chart" view where presidents are plotted along a horizontal timeline from approximately 1905 to 1935. Each president is represented by a portrait and a label indicating their name and term. A red arrow points to a dropdown menu titled "# per Page" which is currently set to 60. The menu also includes options for 20, 40, 80, and 100.

Value
20
40
60
80
100

Create the Chart Instance

am4themes_animated is a theme that automatically animates many amCharts actions. It is a system-wide setting.

Create a Chart instance. The first parameter is the target HTML element to create the chart in. The second parameter references an amCharts chart type class.

```
am4core.useTheme(am4themes_animated);
```

```
const chart = am4core.create(spaceDiv,  
    am4plugins_timeline.SerpentineChart);
```

```
chart.levelCount = 5;
```

...

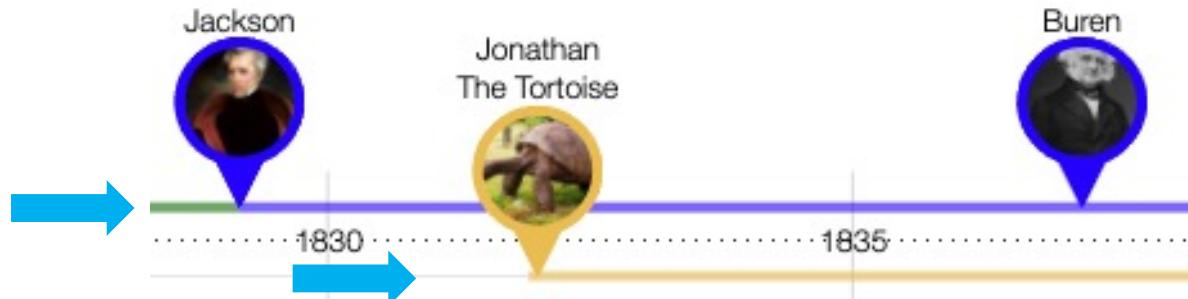
Number of straight lines of serpentine shape

Y-Axis | Category Axis

```
const categoryAxis = chart.yAxes.push(new am4charts.CategoryAxis());  
categoryAxis.dataFields.category = 'category';
```

At least 1 category is required.
Since we only have US Presidents in our timeline, we just set it to a " " category

Set multiple categories if you want an overlapping timeline.
Useful in understanding Jonathan's long life



X-Axis | Date Axis

```
const dateAxis = chart.xAxes.push(new am4charts.DateAxis());  
dateAxis.renderer.line.strokeDasharray = '1,4';  
dateAxis.renderer.line.strokeOpacity = 1;  
dateAxis.renderer.labels.template.verticalCenter = 'middle';
```

The "X-axis"
Creates the axis using
date & time scale



Data Series

Outlining the President terms

This is where the Chart Data is converted to the colored segments on the time axis



1790



1795

```
const series = chart.series.push(new  
am4plugins_timeline.CurveColumnSeries());  
  
series.dataFields.openDateX = 'start';  
series.dataFields.dateX = 'end';  
  
...  
  
series.columns.template.propertyFields.fill =  
'color';  
  
series.columns.template.propertyFields.stroke =  
'color';
```

Pin Bullets – President's Icon

Create pins with the president's photos and party color on the timeline



1790

```
const pinBullet = series.bullets.push(new  
am4plugins_bullets.PinBullet());  
  
pinBullet.locationX = 1;  
  
pinBullet.propertyFields.stroke = 'color';  
  
pinBullet.background.propertyFields.fill = 'color';  
  
pinBullet.image = new am4core.Image();  
  
pinBullet.image.propertyFields.href = 'icon';
```

Text Bullets – President's Name

Create the text labels with the president's names above their icons

George Washington



John Adams

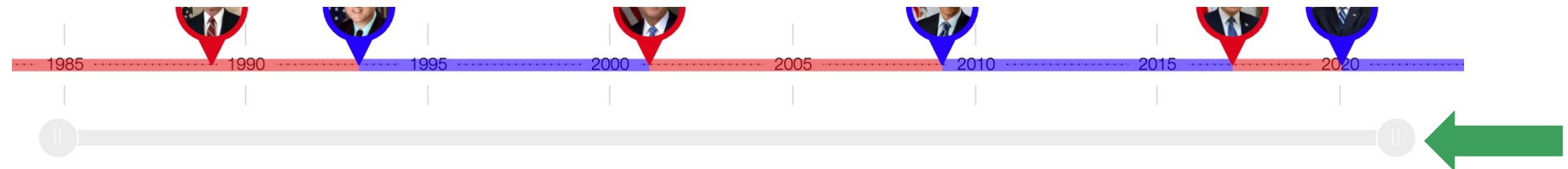


```
const labelBullet = series.bullets.push(new  
am4charts.LabelBullet());  
  
labelBullet.label.propertyFields.text = 'text';  
  
labelBullet.label.textAlign = 'middle';  
  
labelBullet.locationX = 1;  
  
labelBullet.dy = -80;
```

Scrollbar

The scrollbar at the bottom of the chart allows for zooming in the timeline.

```
chart.scrollbarX = new am4core.Scrollbar();
chart.scrollbarX.align = 'center'
chart.scrollbarX.width = am4core.percent(75);
chart.scrollbarX.opacity = 0.5;
chart.scrollbarX.parent = chart.bottomAxesContainer;
```



Cursor / Tooltip

Display the exact year and month on the tooltip when the cursor hovers over the time axis

George Washington



1792-May

1790



```
const cursor = new  
am4plugins_timeline.CurveCursor();  
  
chart.cursor = cursor;  
  
dateAxis.tooltipDateFormat = 'yyyy-MMM';  
  
cursor.xAxis = dateAxis;  
  
cursor.lineY.disabled = true;
```

Optional – Export Chart

Enable the Chart Export option

To not include the tooltip or the scrollbar, we will disable them



```
chart.exporting.menu = new am4core.ExportMenu();  
  
chart.scrollbarX.exportable = false;  
  
dateAxis.tooltip.exportable = false;
```

Where Can I Get Help?

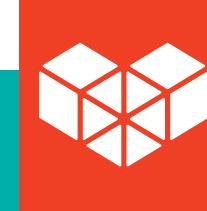
If you're stuck, post your question & code on the

Kintone Developer Forum

forum.kintone.com

The screenshot shows the homepage of the Kintone Developer Forum. At the top, there's a navigation bar with the Kintone logo, "Developer Site", "Sign Up", "Log In", a search icon, and a menu icon. Below the navigation, there are buttons for "all categories", "all tags", and "Categories" (which is highlighted in red). There are also "Latest" and "Top" links. The main content area has three columns: "Category", "Topics", and "Latest". The "Announcements" category has 5 topics, with a post titled "Onboard Users Like a Wizard with Shepherd.JS – React Basics Tutorial Workshop" by a user named "1" posted on Jul 22. The "General" category has 422 topics, with a post titled "Welcome to Discourse" by a user named "0" posted on Apr 15. The "Site Feedback" category has 0 topics, with a post titled "Scanning" for fields in an App? by a user named "2" posted 4d ago. The "Job Listing" category has 1 topic, with a post titled "Seeking Independent Contractors with Kintone" by a user named "1" posted recently.

Category	Topics	Latest
Announcements	5	Onboard Users Like a Wizard with Shepherd.JS – React Basics Tutorial Workshop Jul 22
General	422	Welcome to Discourse Apr 15
Site Feedback	0	Scanning" for fields in an App? 4d
Job Listing	1	Seeking Independent Contractors with Kintone



Any
Questions?

kintone.dev

Thank You!



Join Our Future Workshops!



We are cooking up **new content**
for our **upcoming workshops!**



Join our Meetup to not miss out!

bit.ly/KDP_Events



Workshop Recording on YouTube

This workshop's recording will be posted on
our YouTube Channel!

Our past workshops are posted as well:

Charts: Bubble Cloud, Word Cloud

Introductions: REST API, JS Promise, React x Kintone



bit.ly/KDP_Video

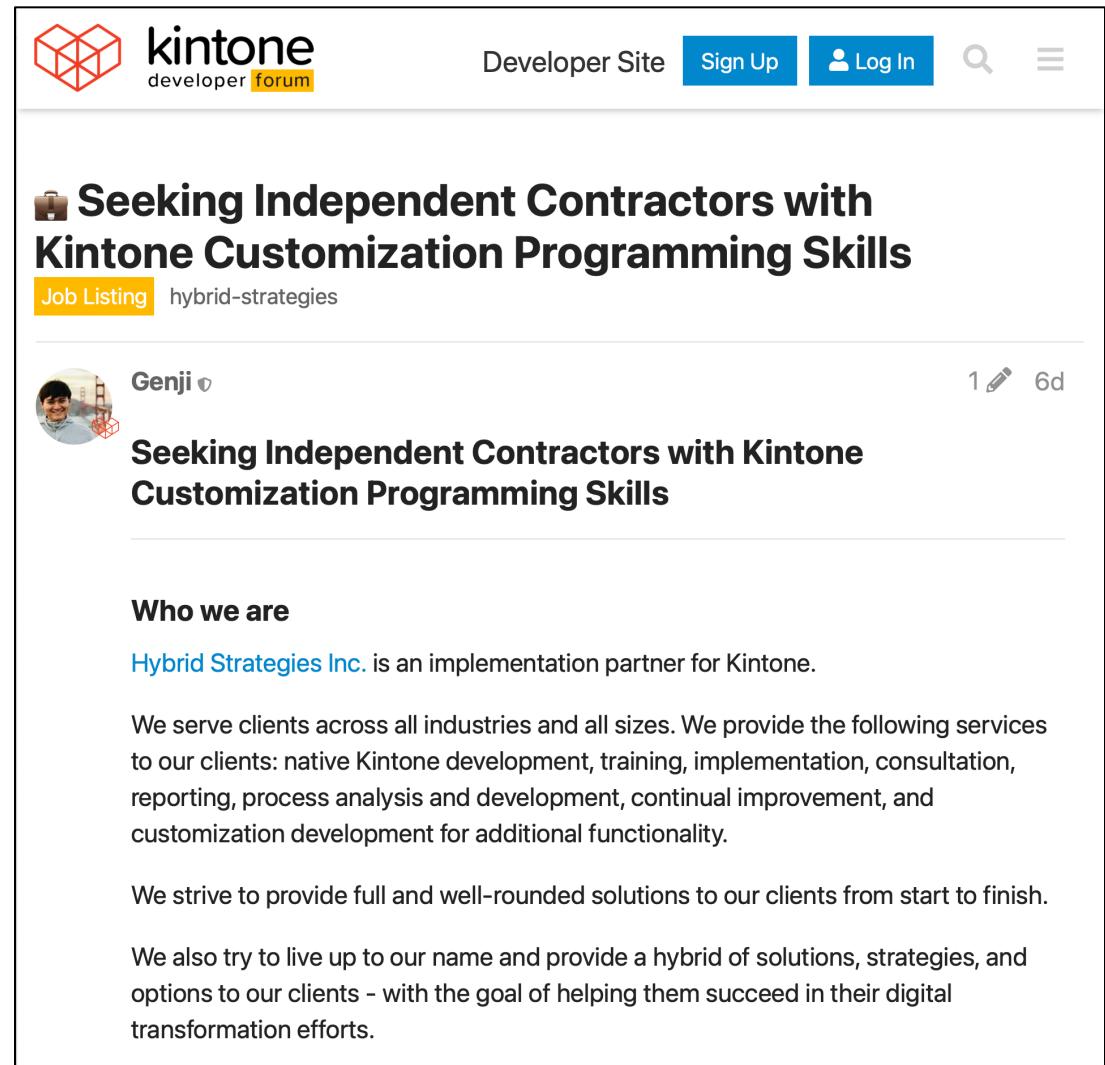
Want a Job?

Our US Partners are looking for programmers to build out Kintone Customizations!

Interested?

Check out the Job Listing Thread over at our Kintone Developer Forum

forum.kintone.dev/c/job-listing/



The screenshot shows a job listing on the kintone developer forum. The header includes the kintone logo, developer forum text, and navigation links for Developer Site, Sign Up, Log In, search, and more. The main post has a title: "Seeking Independent Contractors with Kintone Customization Programming Skills" (with a briefcase icon), categorized under "Job Listing" and "hybrid-strategies". It was posted by a user named Genji, who has a profile picture showing a person in front of the Golden Gate Bridge. The post was made 6 days ago and has 1 edit. Below the post, there's a section titled "Who we are" which describes Hybrid Strategies Inc. as an implementation partner for Kintone, serving clients across all industries and sizes with native Kintone development, training, implementation, consultation, reporting, process analysis and development, continual improvement, and customization development for additional functionality. The text also mentions providing full and well-rounded solutions from start to finish, and living up to their name by providing hybrid solutions, strategies, and options to clients.

Developer Site [Sign Up](#) [Log In](#) [Search](#) [≡](#)

Seeking Independent Contractors with Kintone Customization Programming Skills

Job Listing hybrid-strategies

Genji 6d

Seeking Independent Contractors with Kintone Customization Programming Skills

Who we are

Hybrid Strategies Inc. is an implementation partner for Kintone. We serve clients across all industries and all sizes. We provide the following services to our clients: native Kintone development, training, implementation, consultation, reporting, process analysis and development, continual improvement, and customization development for additional functionality.

We strive to provide full and well-rounded solutions to our clients from start to finish.

We also try to live up to our name and provide a hybrid of solutions, strategies, and options to our clients - with the goal of helping them succeed in their digital transformation efforts.

Thank You to Our Community Partners!

New Tech
Northwest



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React Chicago



Thank You for Your Participation!

**Fill out our quick survey
for a chance to win a
\$25 Amazon gift card!**



bit.ly/KDP23FEB

Thank You!

