DrupalCon

NASHVILLE **2018**

APRIL 9-13

WEBFORM:

THERE IS THIS

FOR THAT

HELLO!

Hi, my name is Jacob Rockowitz.

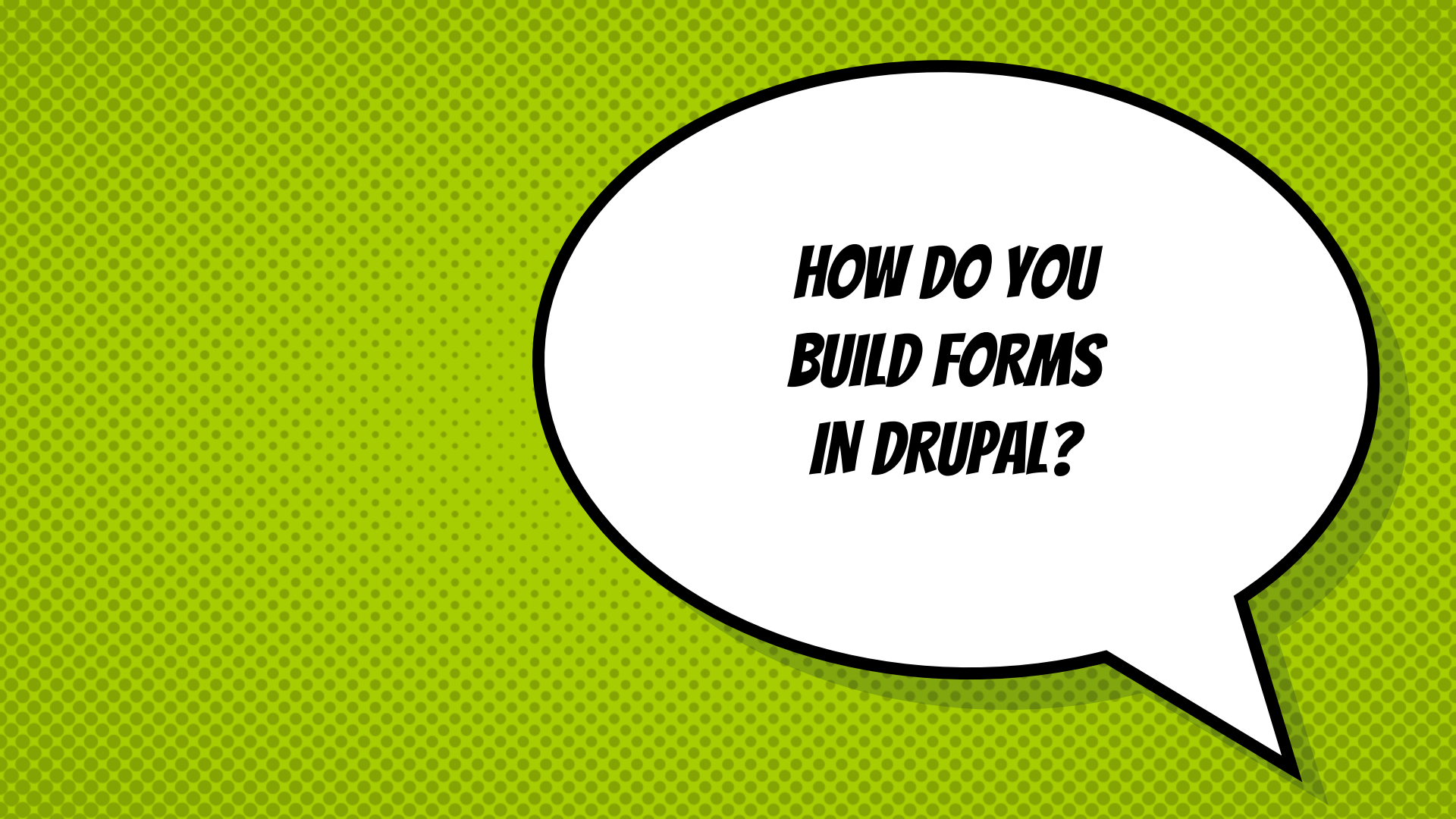
- I am known as jrockowitz on the web.
- I am a Drupal developer and software architect.
- I built and maintain the Webform module for Drupal 8.

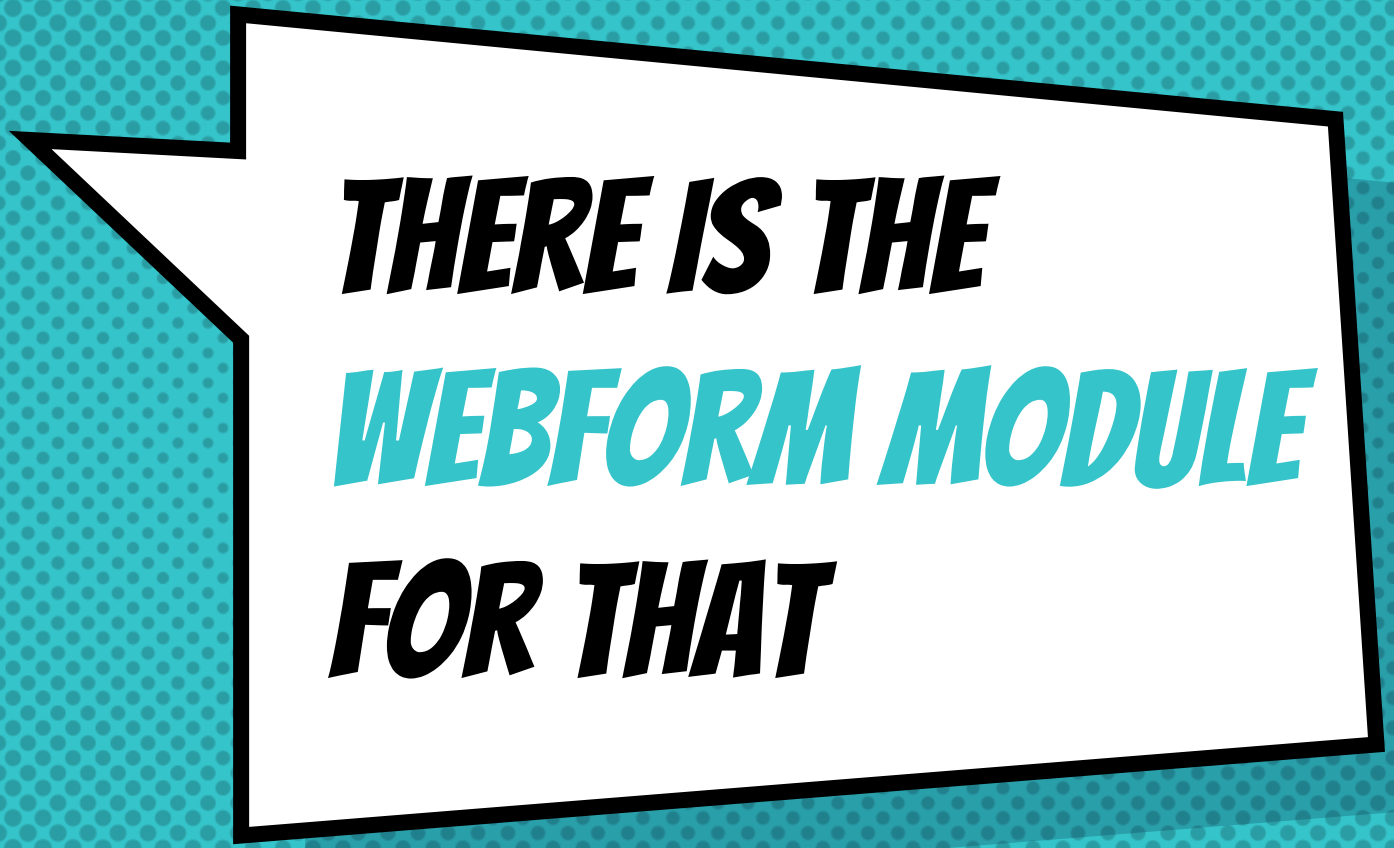
THIS IS NOT ABOUT...

THIS IS NOT ABOUT...

- × **The history** of the Webform module
- × **Installing** the Webform module
- × **Alternatives** to the Webform module
- × **Future** of the Webform module
- × **Theming** and styling webforms
- × **Managing** webform submissions

THIS IS ABOUT BUILDING AWESOME FORMS


How do you
build forms
in Drupal?

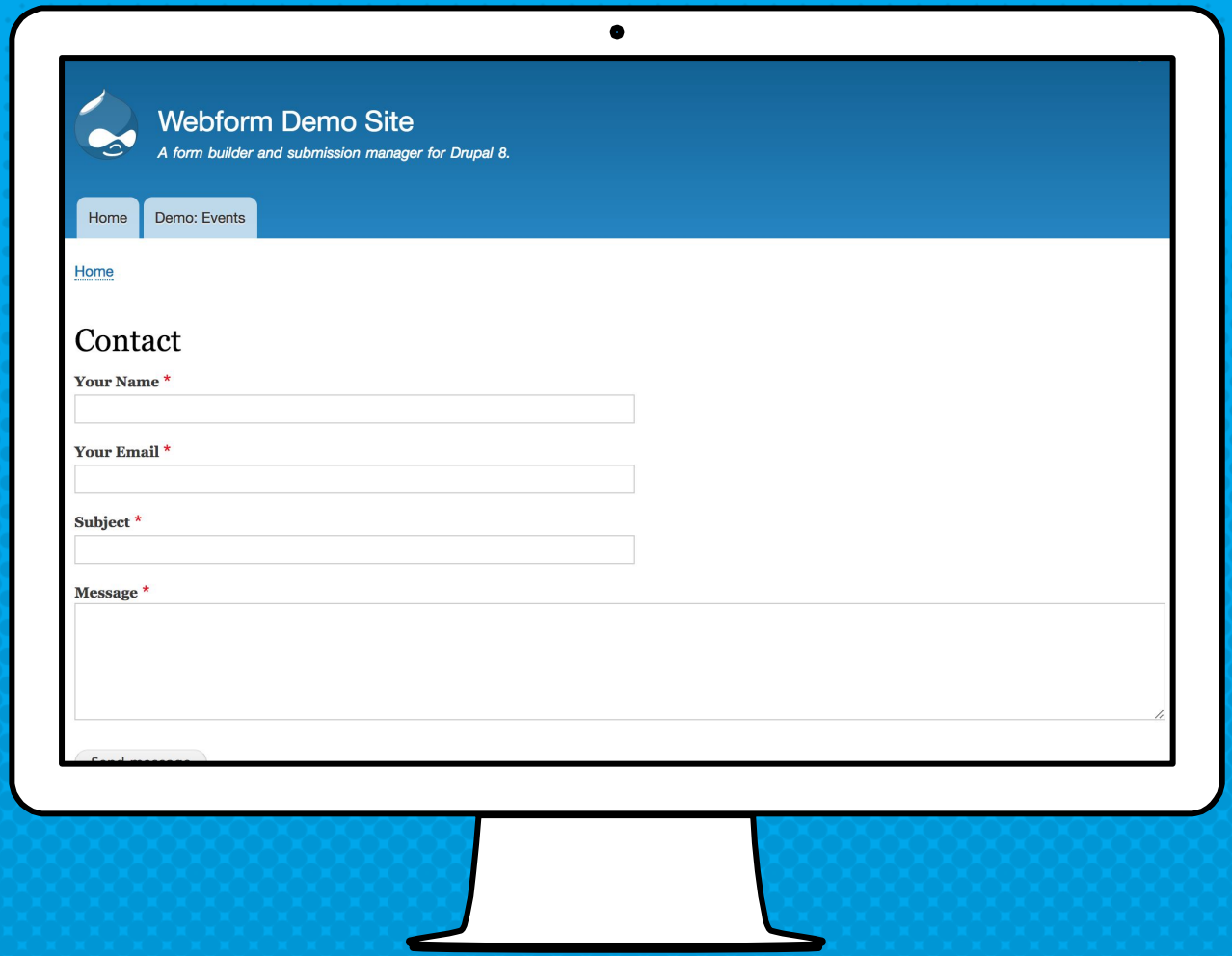

THERE IS THE
WEBFORM MODULE
FOR THAT

THE WEBFORM MODULE IS A POWERFUL AND FLEXIBLE OPEN SOURCE FORM BUILDER & SUBMISSION MANAGER FOR DRUPAL 8

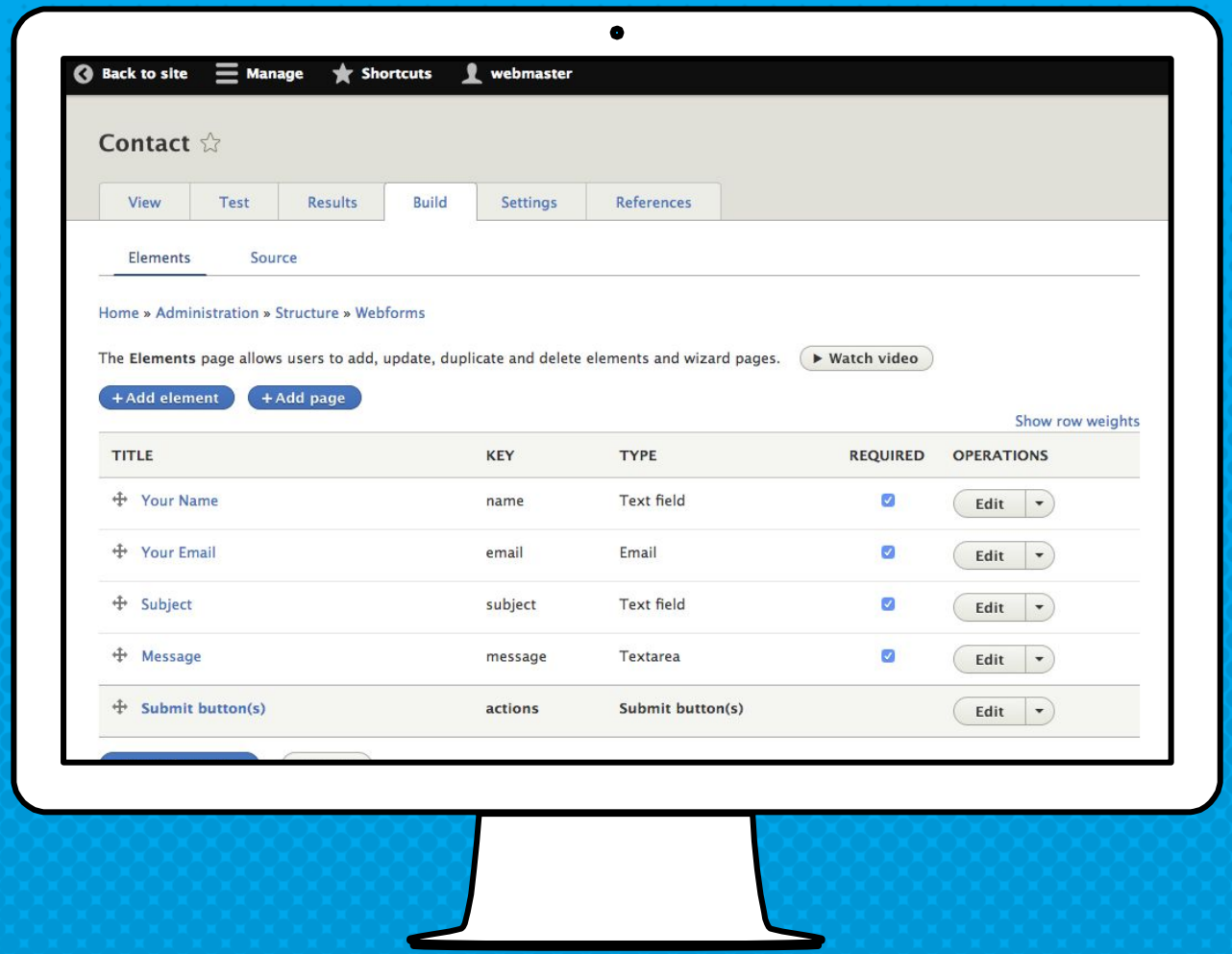
IT PROVIDES ALL THE FEATURES EXPECTED FROM AN ENTERPRISE PROPRIETARY FORM BUILDER...

...COMBINED WITH THE FLEXIBILITY AND OPENNESS OF DRUPAL

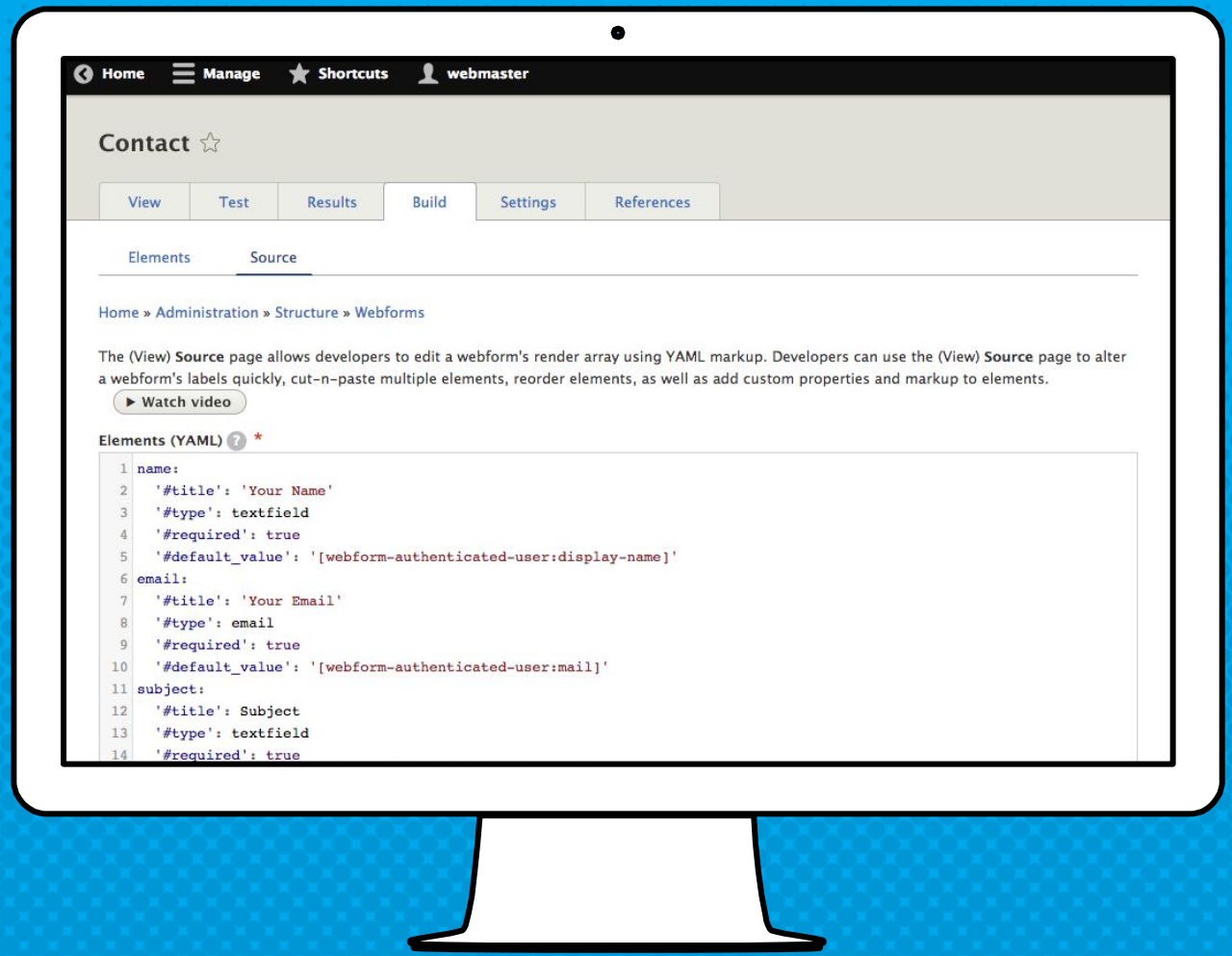
THIS IS A WEBFORM



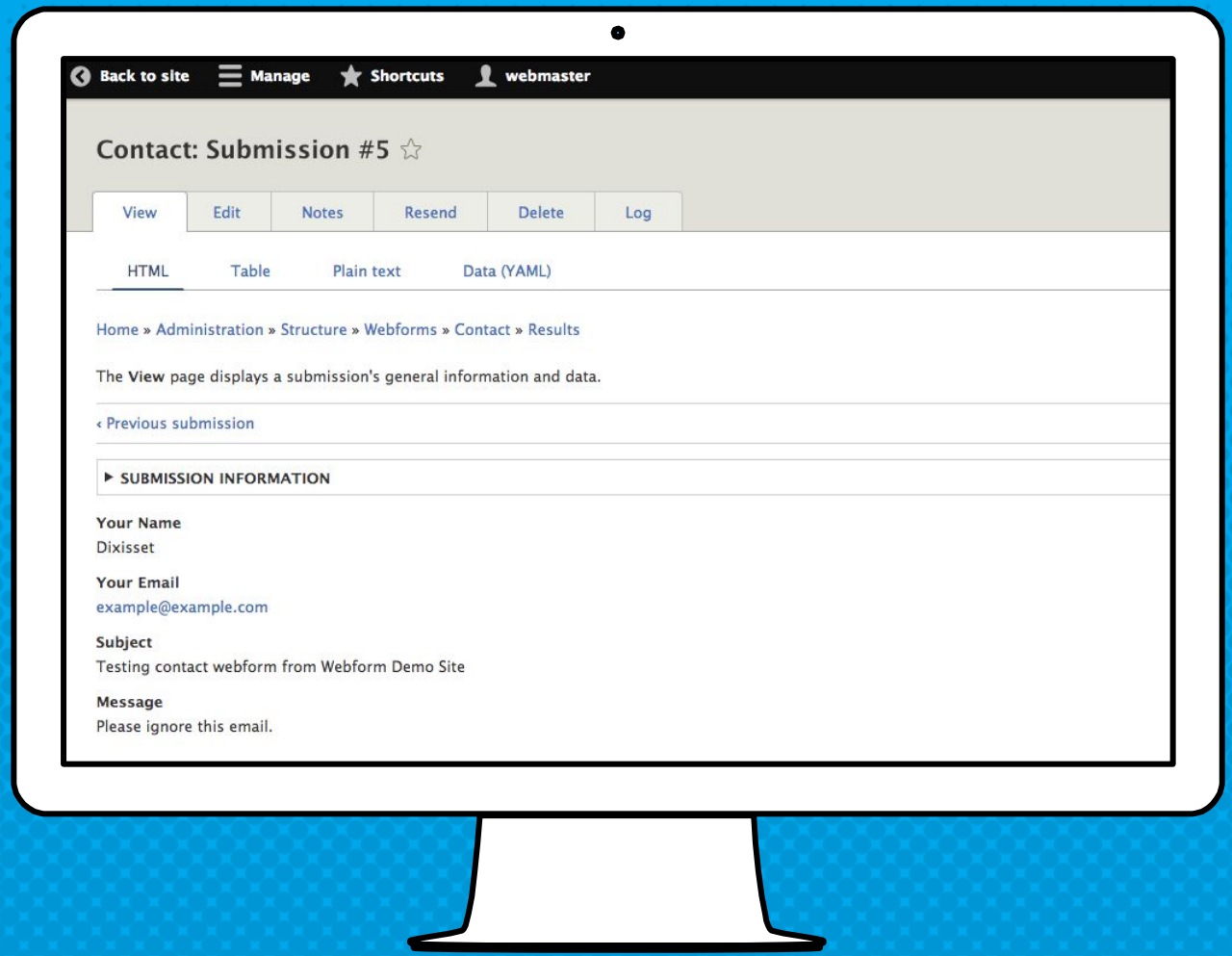
THIS IS THE WEBFORM BUILDER



THIS IS THE WEBFORM SOURCE (YAML) EDITOR



THIS IS A WEBFORM SUBMISSION

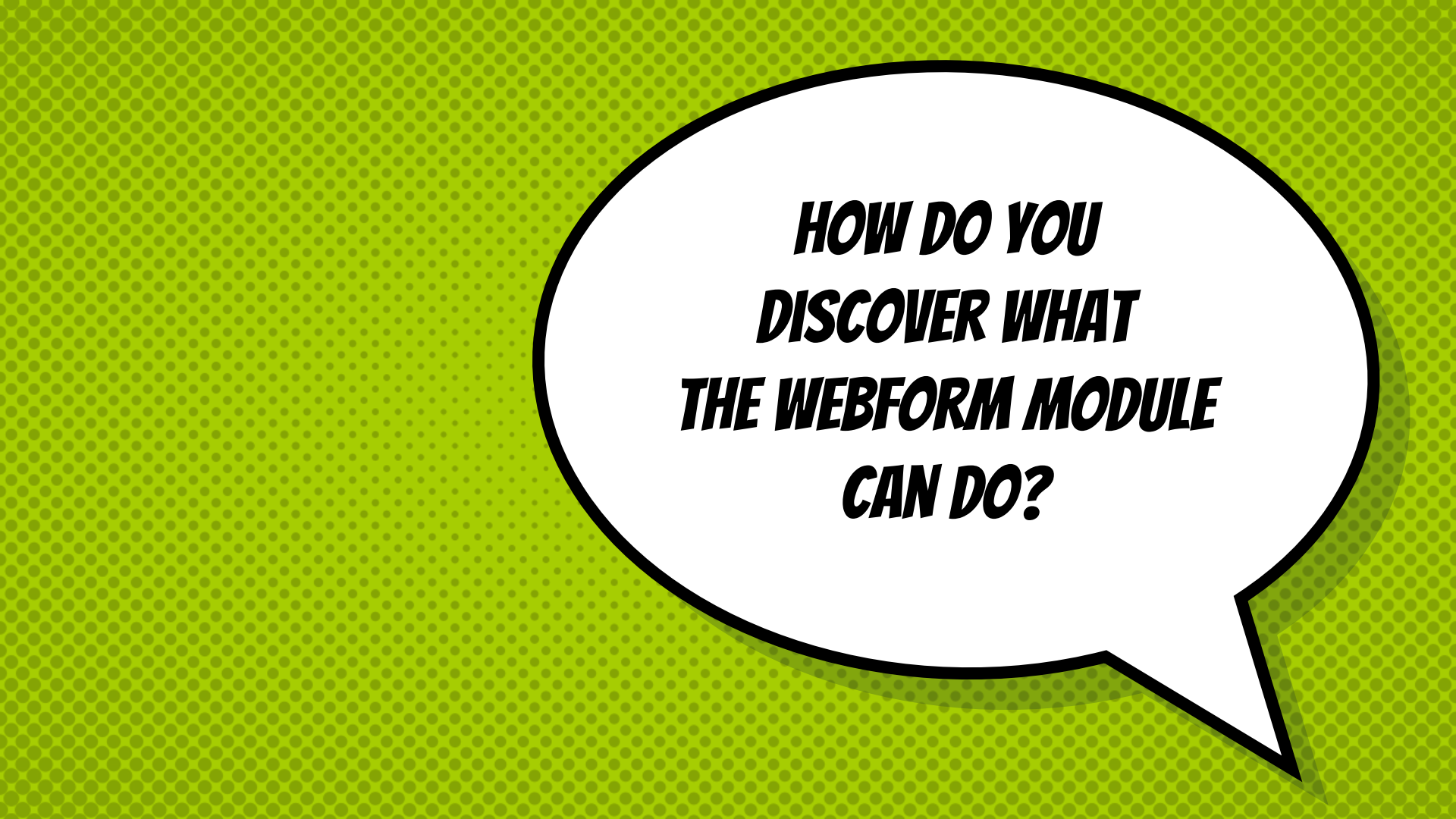


THE USE CASE...

- **BUILD** a form or copy a template
- **PUBLISH** the form as a page, node, or block
- **COLLECT** form submissions
- **SEND** confirmations and notifications
- **REVIEW** results online
- **DISTRIBUTE** results as CSV or remote post

ONCE AGAIN, THE USE CASE...

<demo>
The elevator pitch


How do you
discover what
the webform module
can do?

THERE ARE
EXAMPLES
FOR THAT

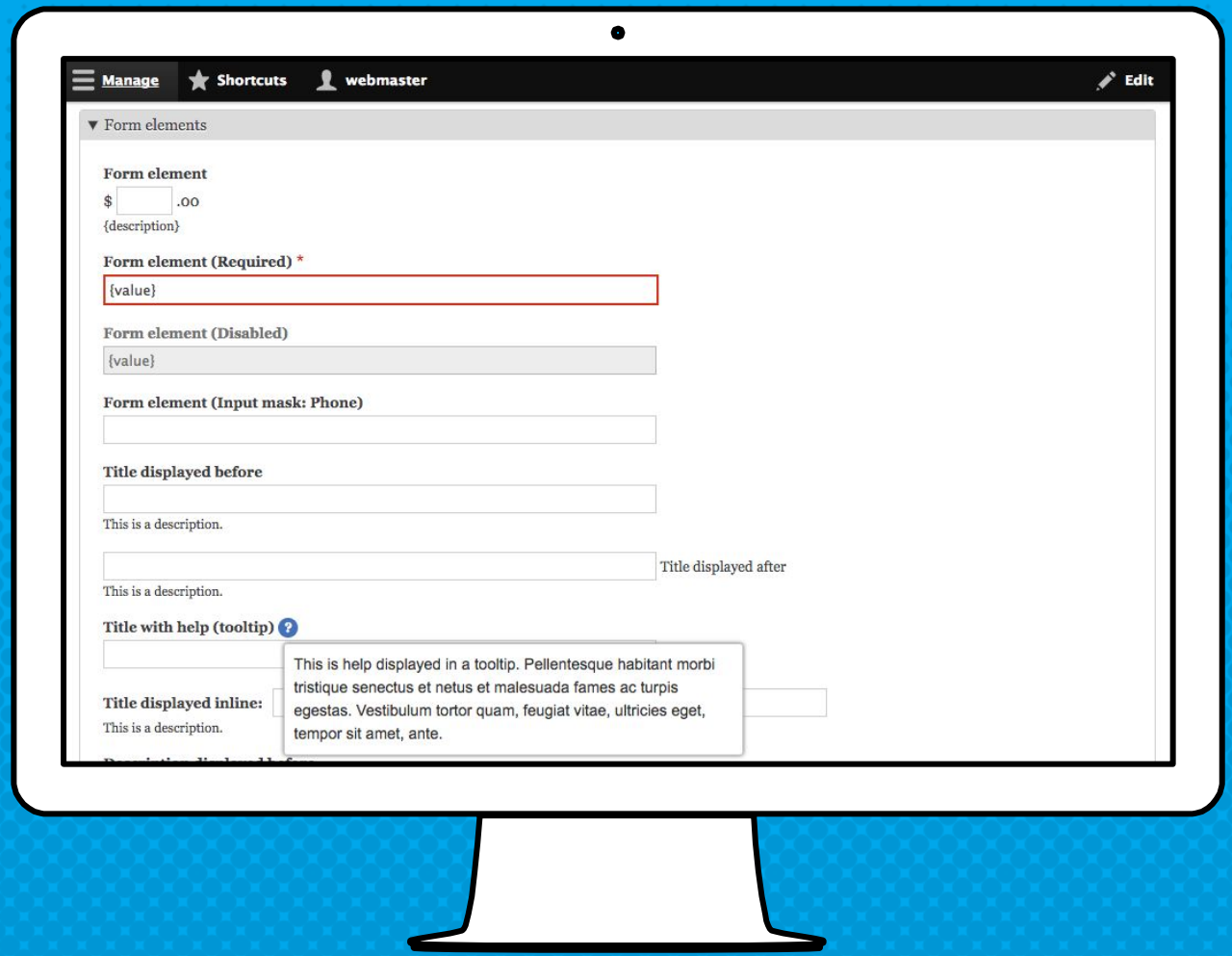
THE WEBFORM MODULE PROVIDES EXAMPLES & DEMOS THAT CAN BE USED AS A STARTING POINT FOR BUILDING FORMS & APPLICATIONS

THERE ARE EXAMPLES & DEMOS OF...

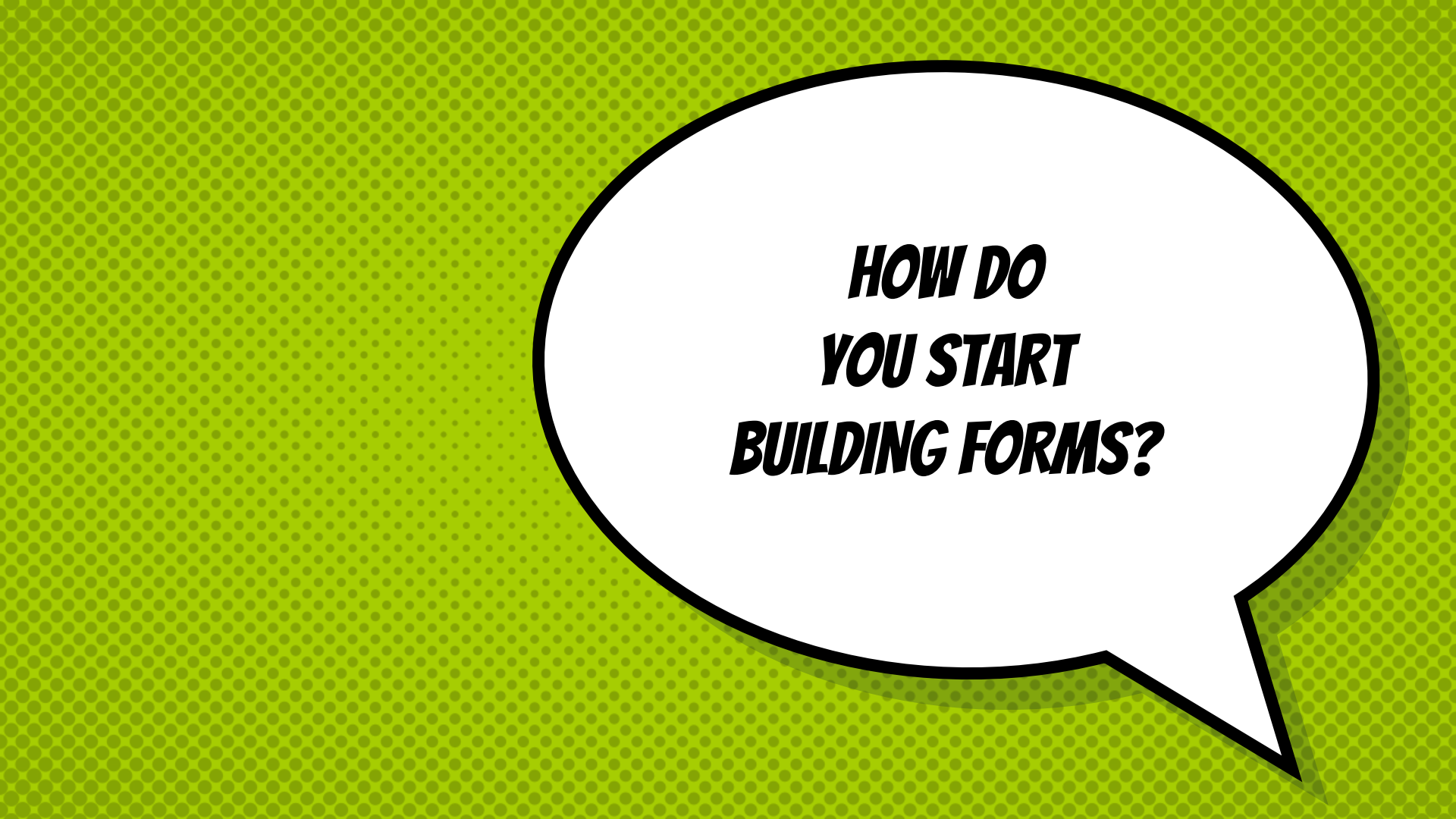
- Every element type
- Multi-step forms (wizards)
- Conditional logic
- Flexbox layouts

- Event registration
- Application evaluation

THE EXAMPLE STYLE GUIDE IS VERY HELPFUL & COMPLETELY CUSTOMIZABLE



<demo>
Learn by example



HOW DO YOU START BUILDING FORMS?

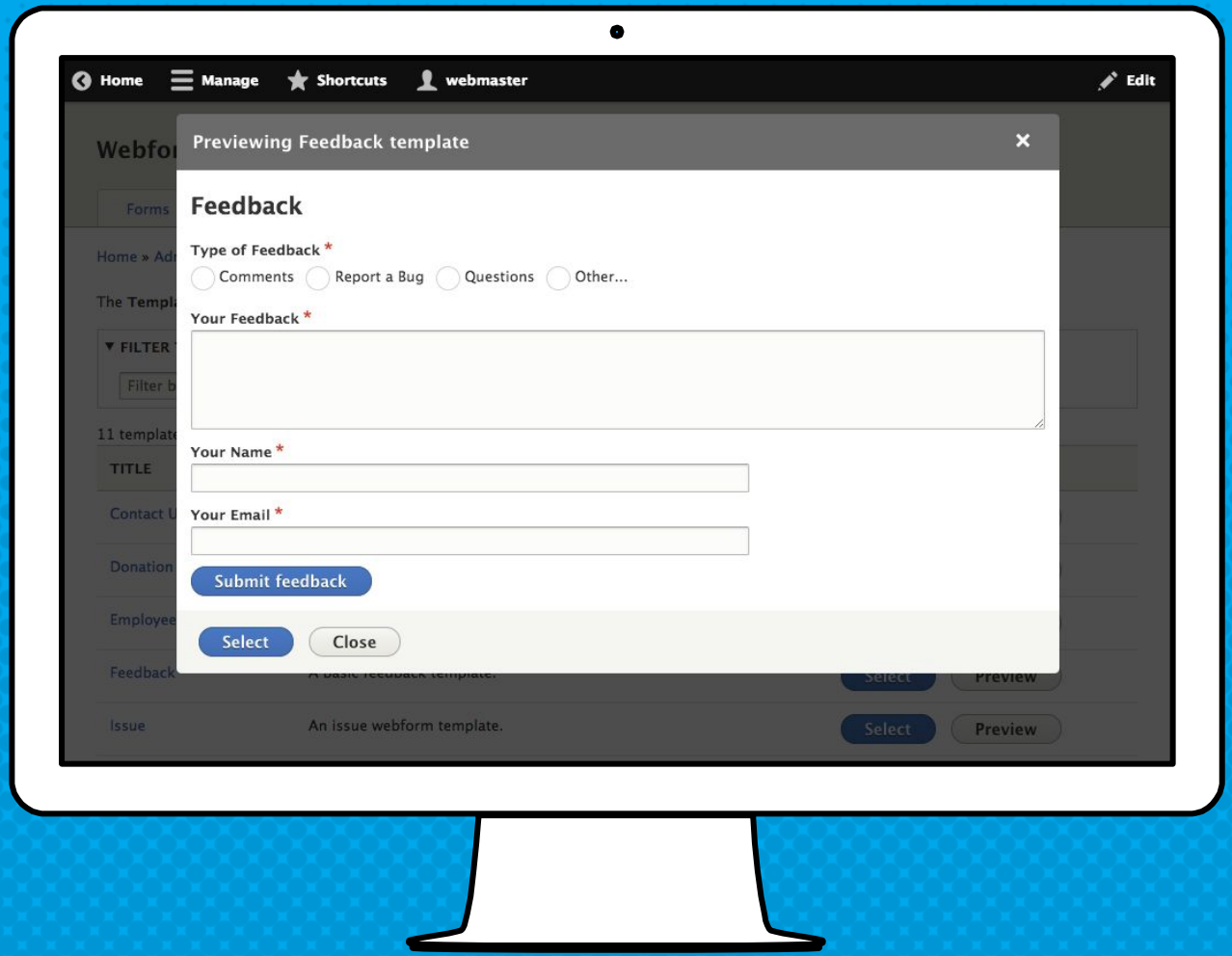
THERE ARE
TEMPLATES
FOR THAT

TEMPLATES ARE FORMS
THAT CAN BE
COPIED TO
CREATE NEW FORMS

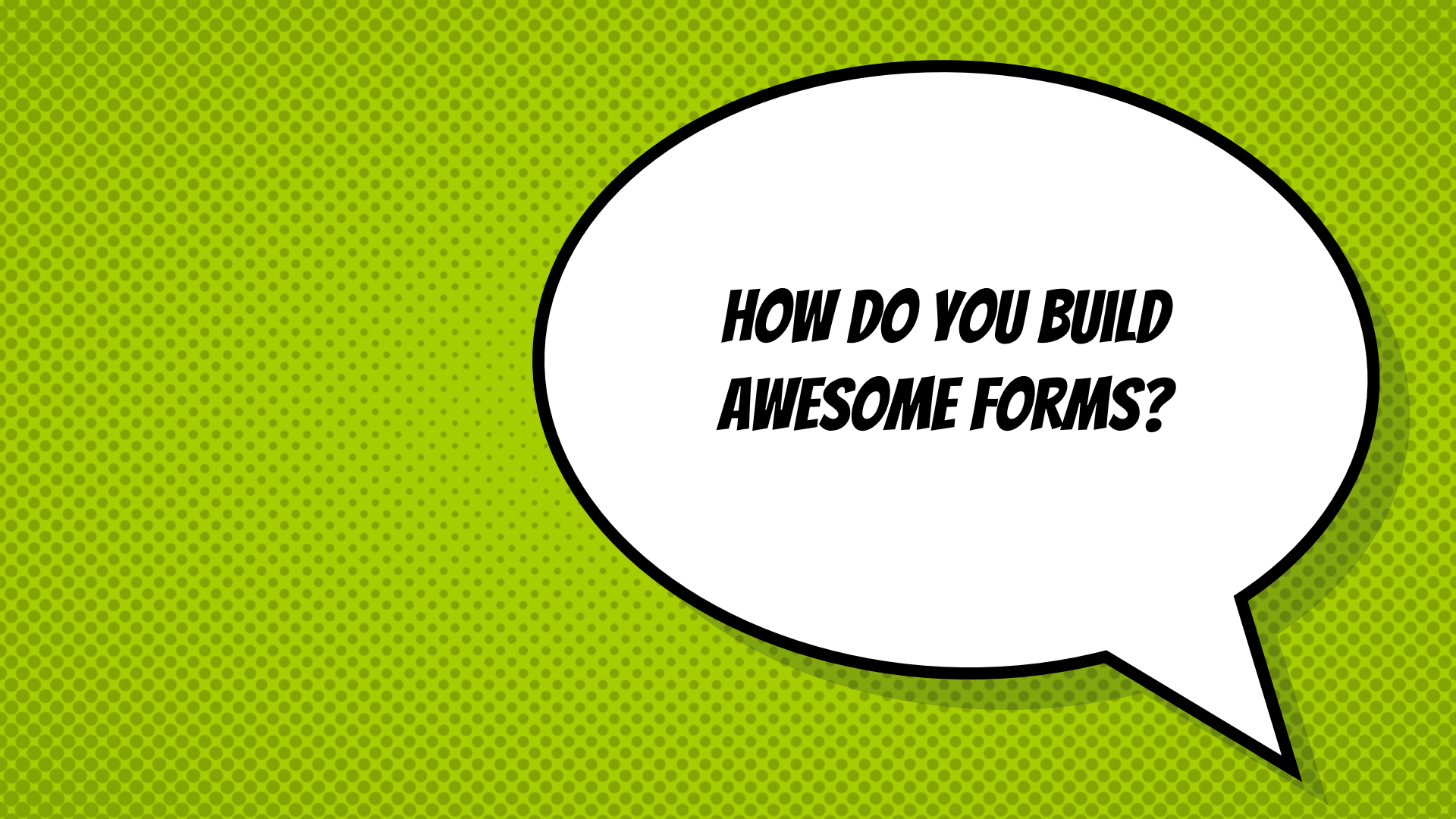
WEBFORM TEMPLATES

- Templates are reusable forms
- A form created from a template is a copy (a.k.a duplicate)
- Changing or deleting a template does not change any existing forms

THIS IS A WEBFORM TEMPLATE



<demo>
Selecting a template


HOW DO YOU BUILD
AWESOME FORMS?

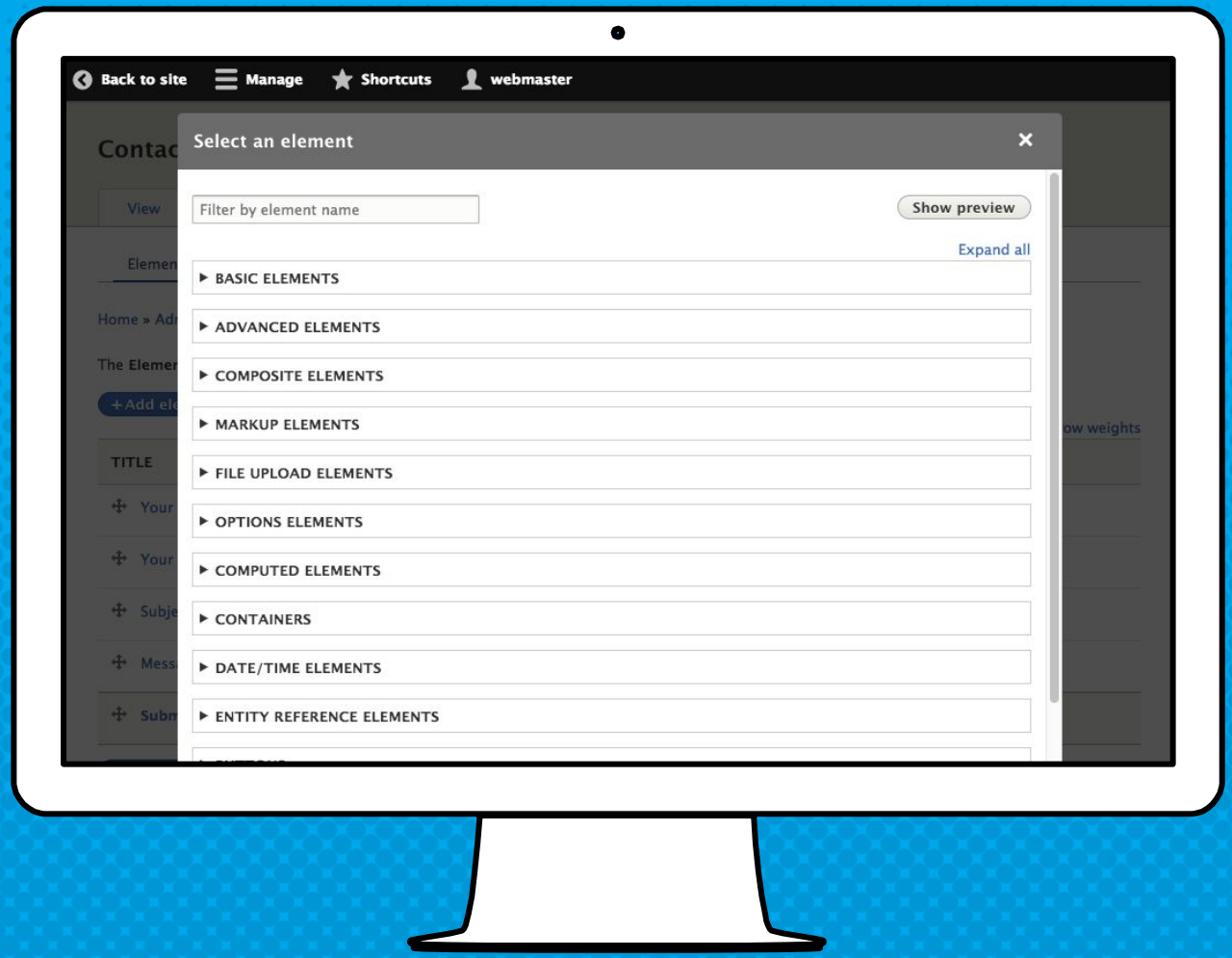
THERE ARE
ELEMENTS
FOR THAT

A FORM IS A
COLLECTION OF ELEMENTS,
WHICH INCLUDES
INPUTS, COMPOSITES,
CONTAINERS, & PAGES
THAT ARE USED TO
COLLECT A SUBMISSION

The Anatomy of a Form

- **Elements**
  Anything that is displayed on a form
- **Inputs**
  An element that collects a value
- **Composites**
  A collection of inputs used to collect a group of values
- **Containers**
  An element that holds sub-elements
- **Pages**
  A container that is displayed as a page within a multi-step wizard

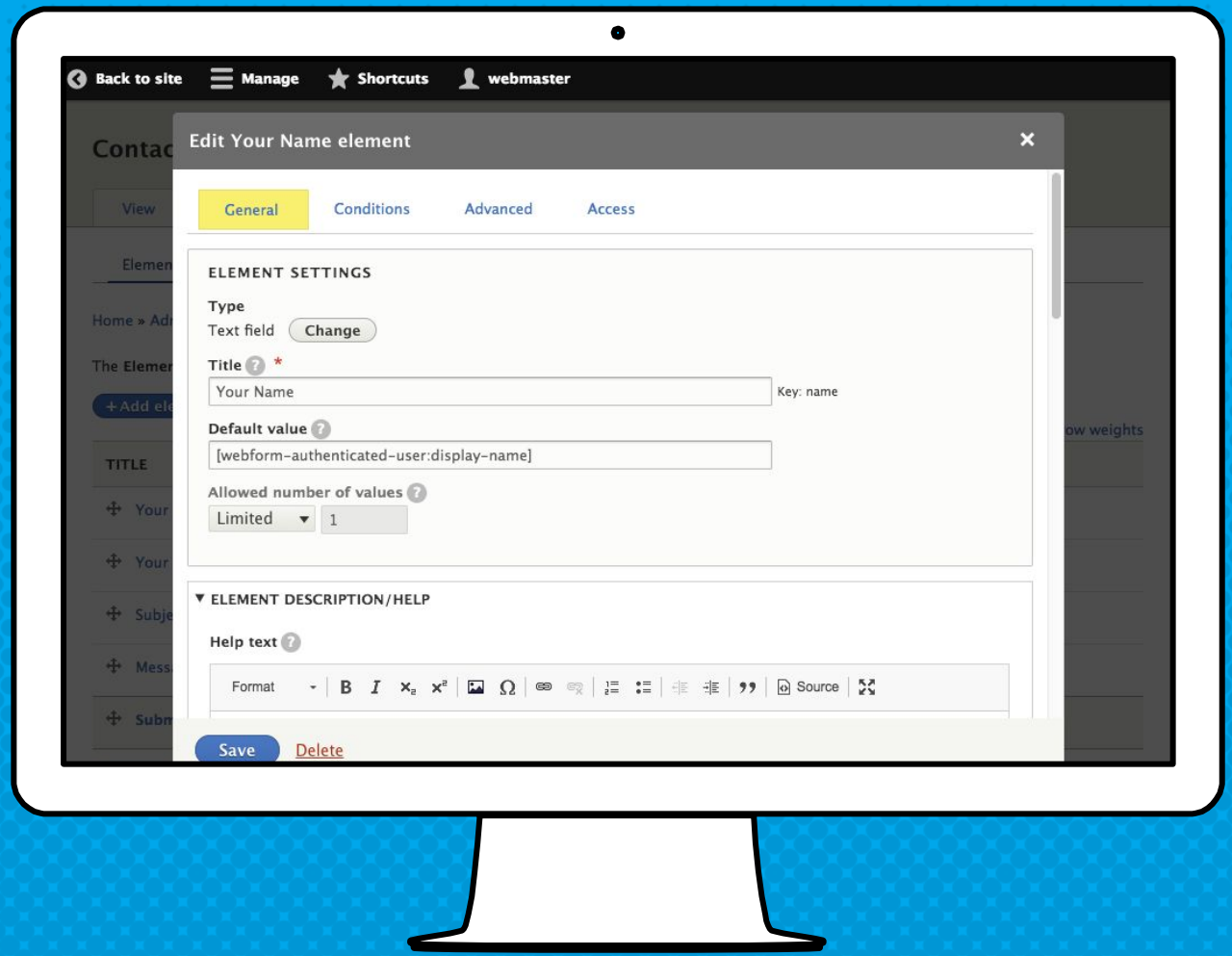
THERE ARE MANY DIFFERENT TYPES OF ELEMENTS



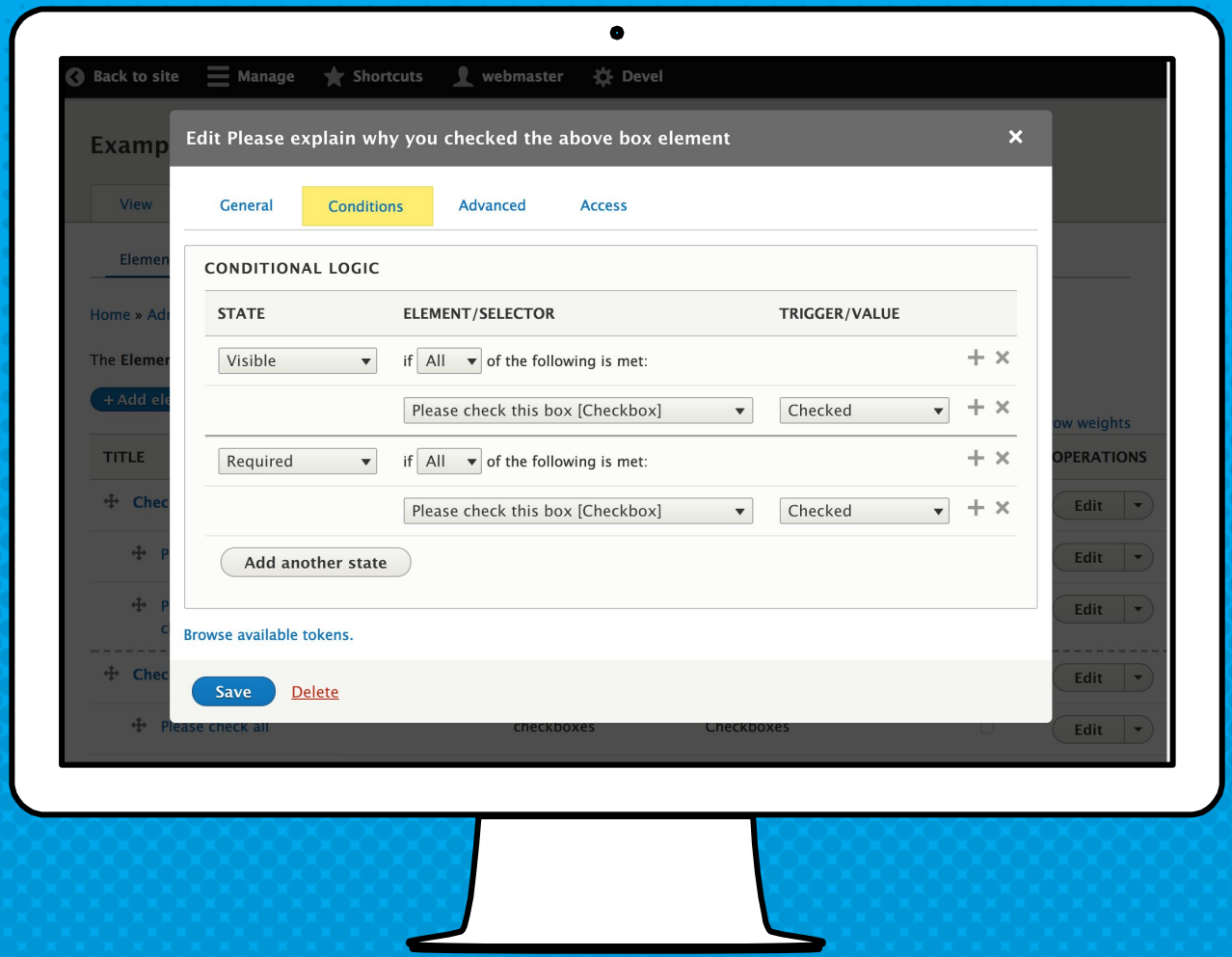
The anatomy of a form element

- **Definition:** Name, cardinality, & default value
- **Labels:** Title, description, “help” text & more
- **Display:** Prefix, suffix, size, input masks, etc.
- **Validation:** Required, unique, pattern, counter, etc.
- **Conditions:** Hide/show, required & disabled
- **Access:** Roles, user or permission
- **Advanced:** Custom attributes & settings

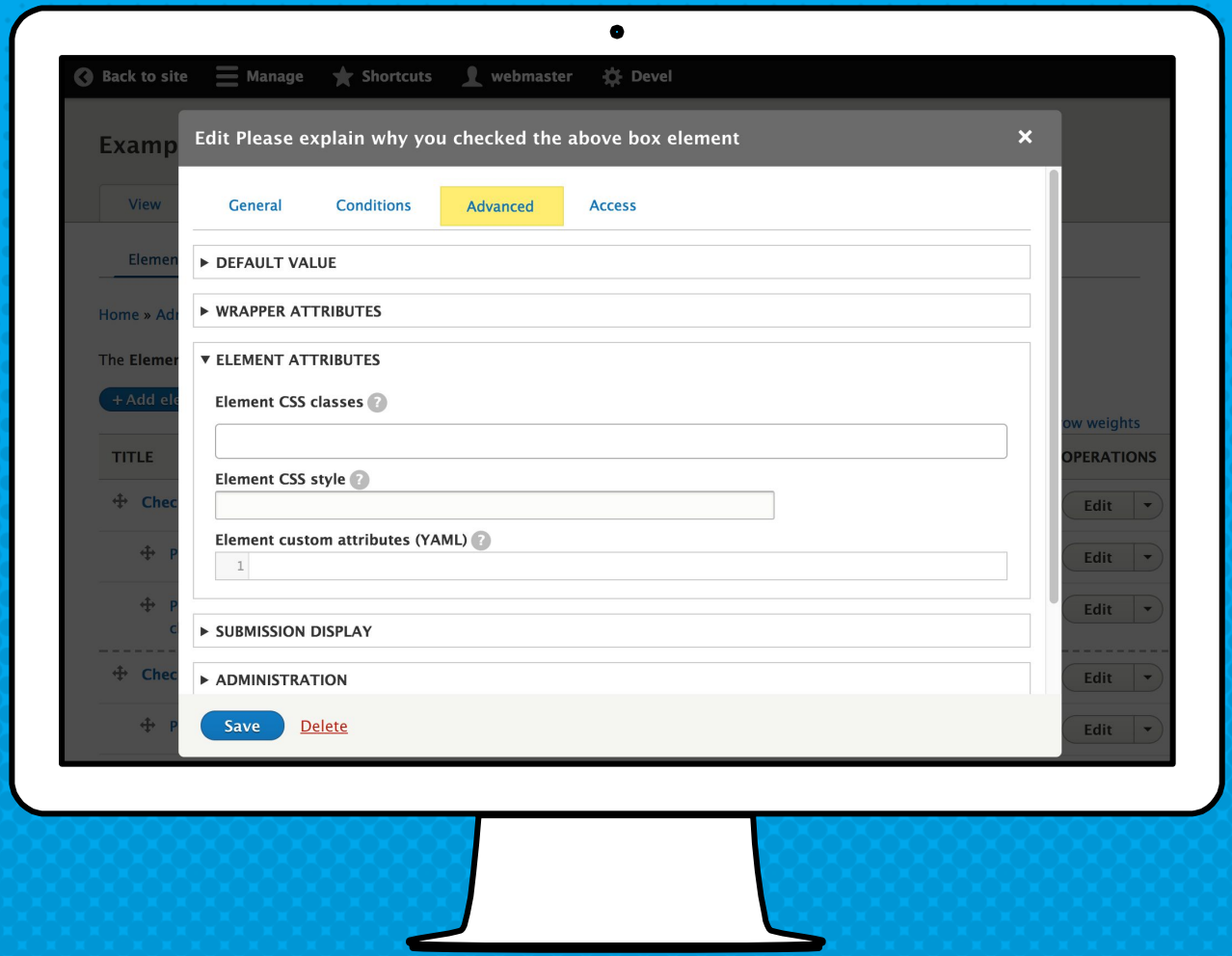
THIS IS A WEBFORM ELEMENT EDIT FORM



THIS IS CONDITIONAL LOGIC



THESE ARE ADVANCED SETTINGS



TYPES OF INPUTS

- **Text:** Text field, textarea, HTML editor and more....
- **Options:** Checkboxes, radios, select, buttons, images, and more....
- **File uploads:** Documents, images, videos, audio, and more....
- **Widgets:** Rating, signature, phone, email, toggle, and more....
- **Entity Reference:** Terms, nodes, and users

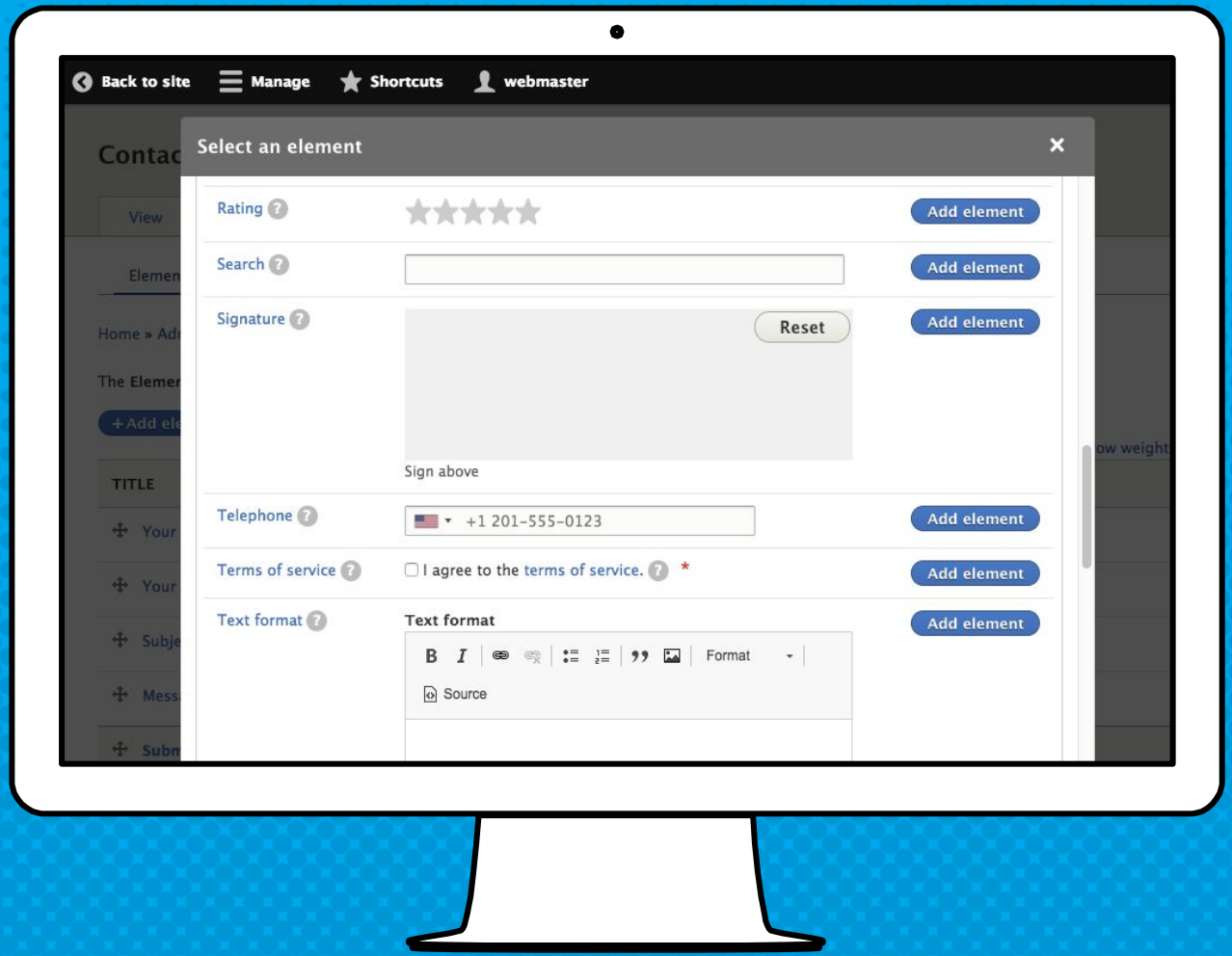
TYPES OF CONTAINERS

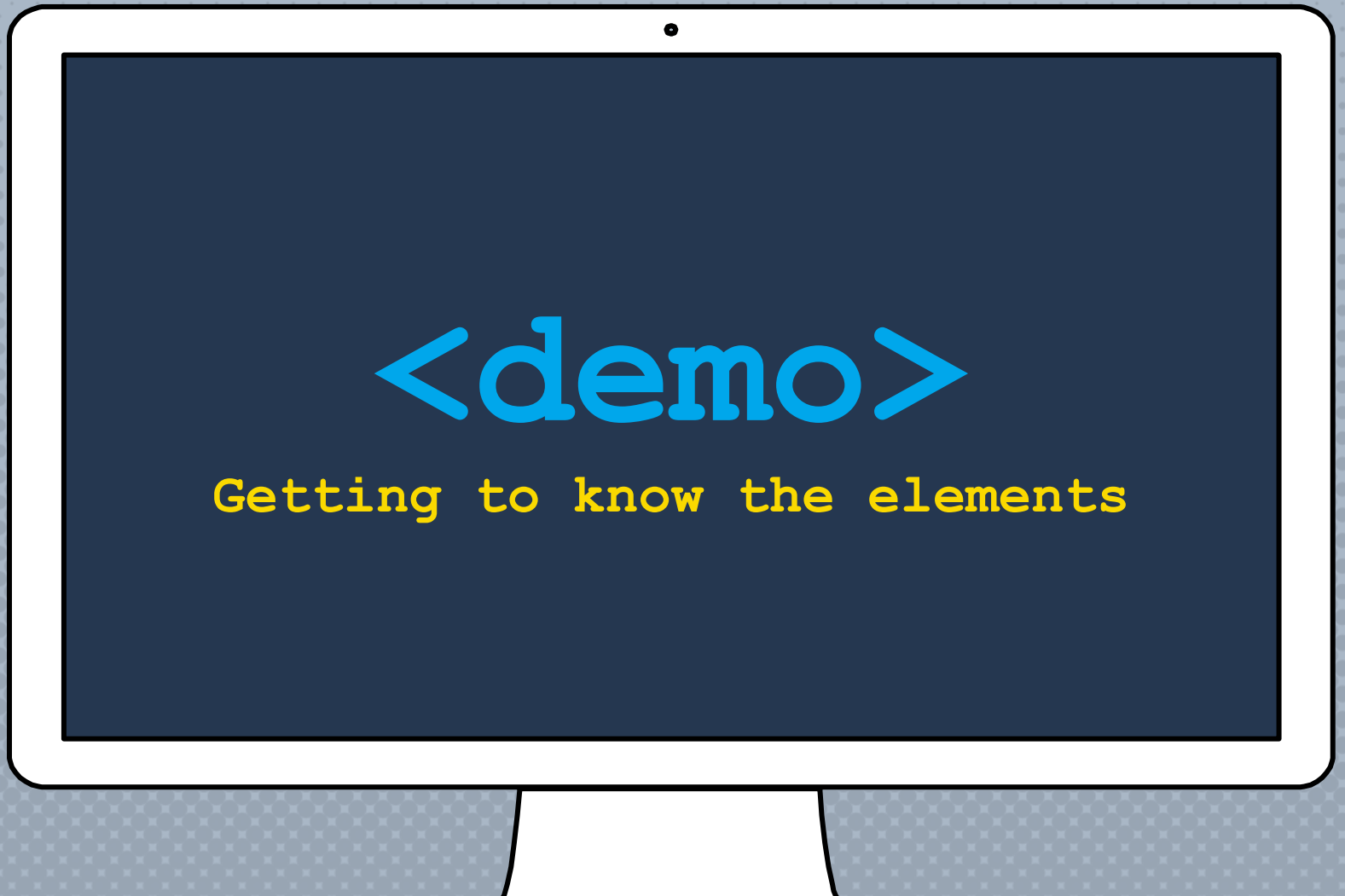
- **Container:** Basic with sub-elements
- **Section:** Header with sub-elements
- **Fieldset:** Group of elements
- **Details:** Collapsible group of elements
- **Flexbox:** Used for multi-column layouts

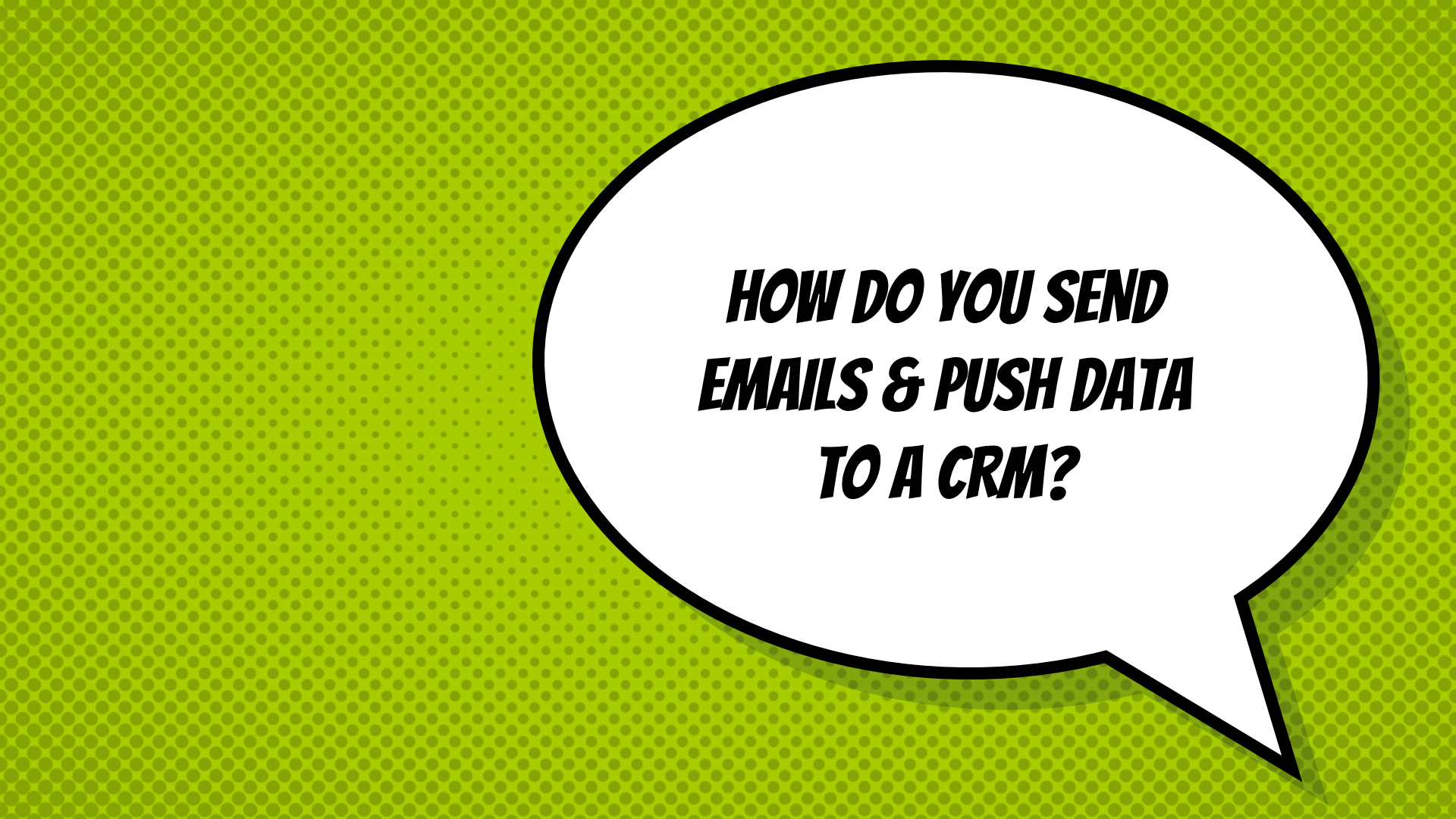
TYPE OF COMPOSITE ELEMENTS

- Likert (Surveys)
- Locations/Address/Contact
- Links/URLs
- Names
- Custom composite element

DON'T FORGET THAT YOU CAN PREVIEW ALL AVAILABLE ELEMENTS




<demo>
Getting to know the elements



HOW DO YOU SEND EMAILS & PUSH DATA TO A CRM?

THERE IS A
HANDLER
FOR THAT

HANDLERS ARE USED TO
ROUTE SUBMITTED DATA
TO APPLICATIONS
& SEND EMAIL NOTIFICATIONS

WEBFORM HANDLER USE CASES

- Email notification and confirmation
- Push data to CRM
- Subscribe to mailing lists
- Flag a submission based on submitted values
- Conditionally change confirmation message

WEBFORM HANDLERS

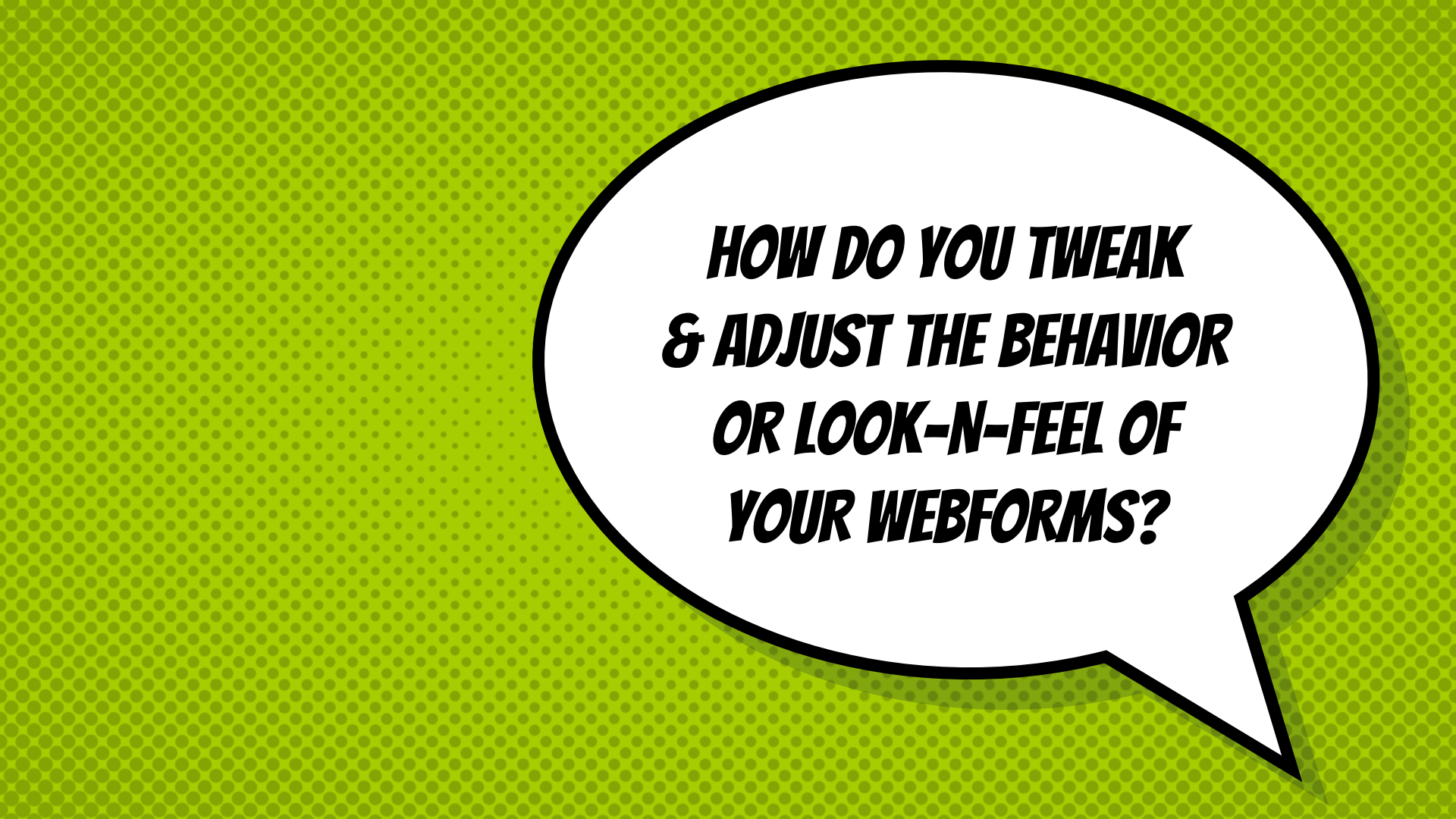
Email & Scheduled Email
Sends a webform submission via an email

Action & Settings
Trigger a conditional action or setting on a submission

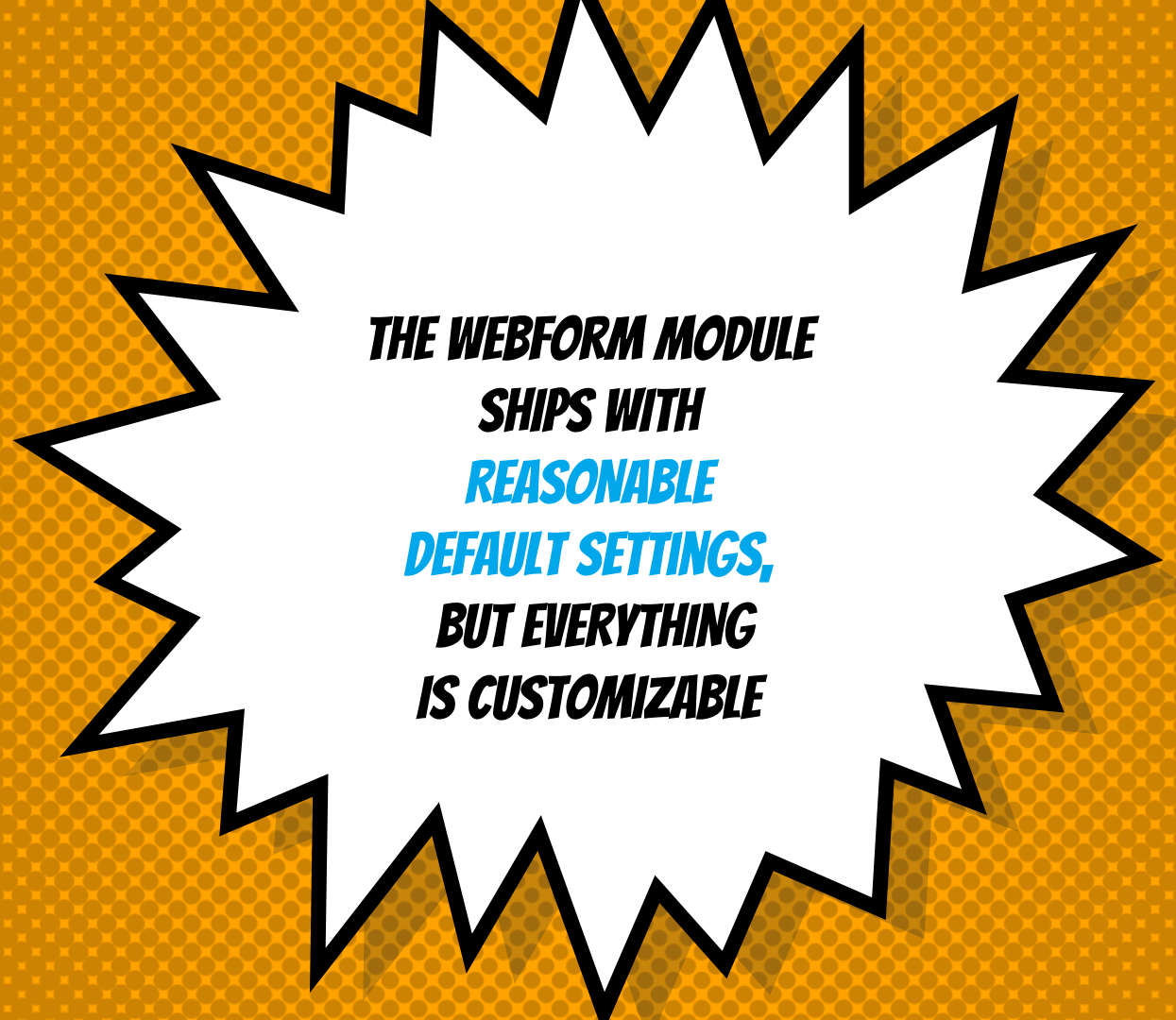
Remote Post
Posts webform submissions to a URL

Debug
Debug webform submission

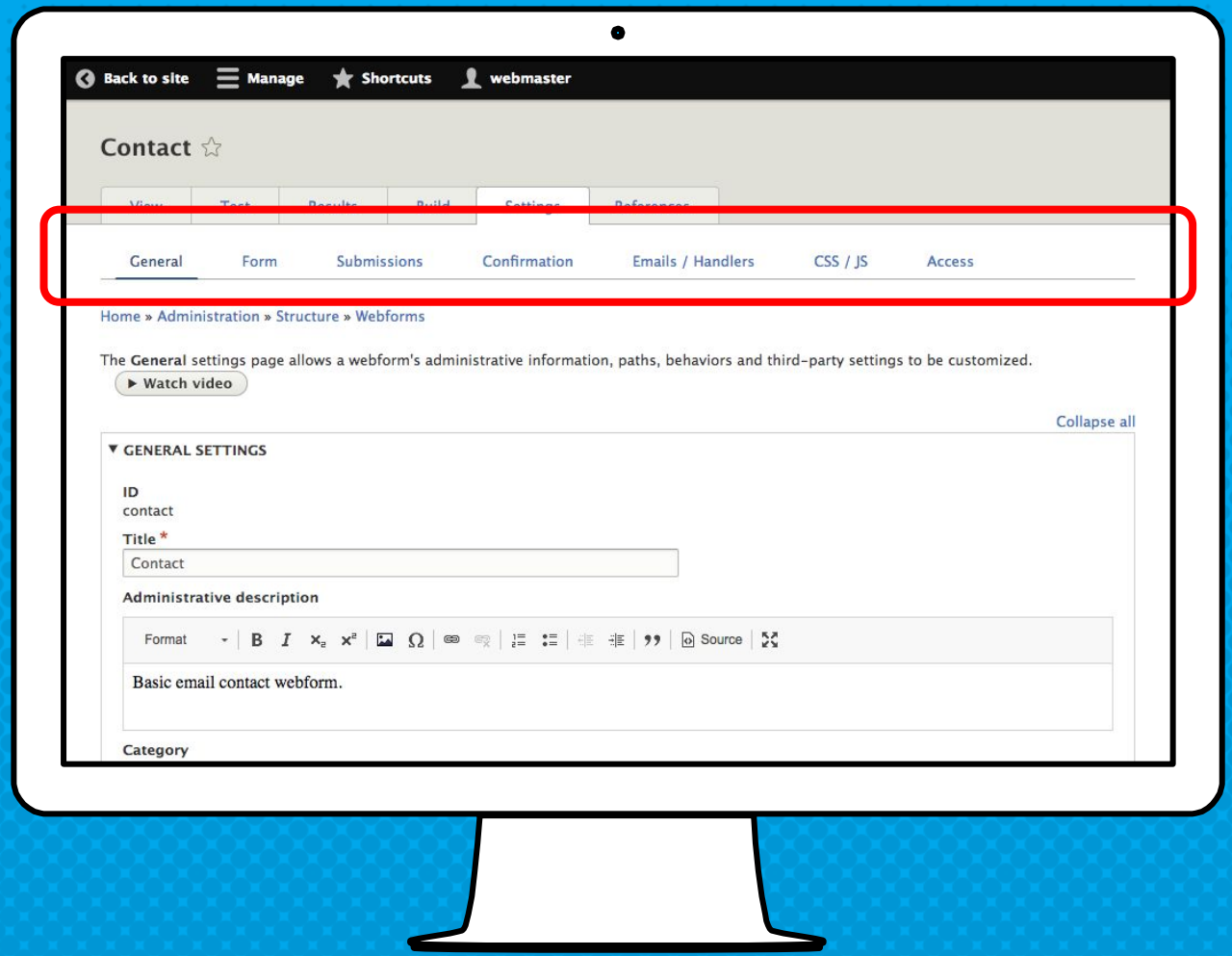
<demo>
Sending email & remote posts


How do you tweak
& adjust the behavior
or look-n-feel of
your webforms?

THERE ARE
SETTINGS
FOR THAT


THE WEBFORM MODULE
SHIPS WITH
REASONABLE
DEFAULT SETTINGS,
BUT EVERYTHING
IS CUSTOMIZABLE

- x GENERAL
- x FORM
- x SUBMISSIONS
- x CONFIRMATION
- x EMAIL/HANDLERS
- x CSS/JS
- x ACCESS



General settings

- Disable saving of results
- Use the webform as a template
- Customize URL aliases
- Ajaxify the form
- Third party settings (e.g., Honeypot & Antibot)

Form Settings & Behaviors

- Set open and close dates
- Customize messages and labels
- Pre-populate using query string parameters
- Tweak multi-step wizard progress bar
- Enable submission previews

Submission settings & behaviors

- Submission labels and messages
- Submission limits
- Save drafts
- Submission purging
- Autofill

Confirmation Types & Messages

- Dedicated confirmation page
- Inline message
- Status message
- Modal confirmation dialog
- Redirect to external or internal URLs

Custom CSS & JavaScript

Site builders and front end developers can inject custom CSS & JavaScript to tweak a webform's look-n-feel and client-side behaviors.

- Tweaks font types and sizes
- Adjusts margins, padding, and layout
- Client-side validation and/or hide/show logic

Access Controls

Set access rules by role, user, and/or permission

Rules include:

- Create, view, update, delete, and purge *all* submissions or own submissions
- Administer webform and submissions

<demo>
Customizing a webform's look-n-feel

SHOULD YOU CUSTOMIZE EVERYTHING?

SHOULD YOU CUSTOMIZE NOTHING?

Tips for managing settings & behaviors

- Know what is possible (and impossible)
- **K**eep **I**t **S**imple **S**tupid (K.I.S.S. principle)

- Default settings can be applied using `hook_webform_create()`
- Templates can define default settings

How can you change global/default settings?

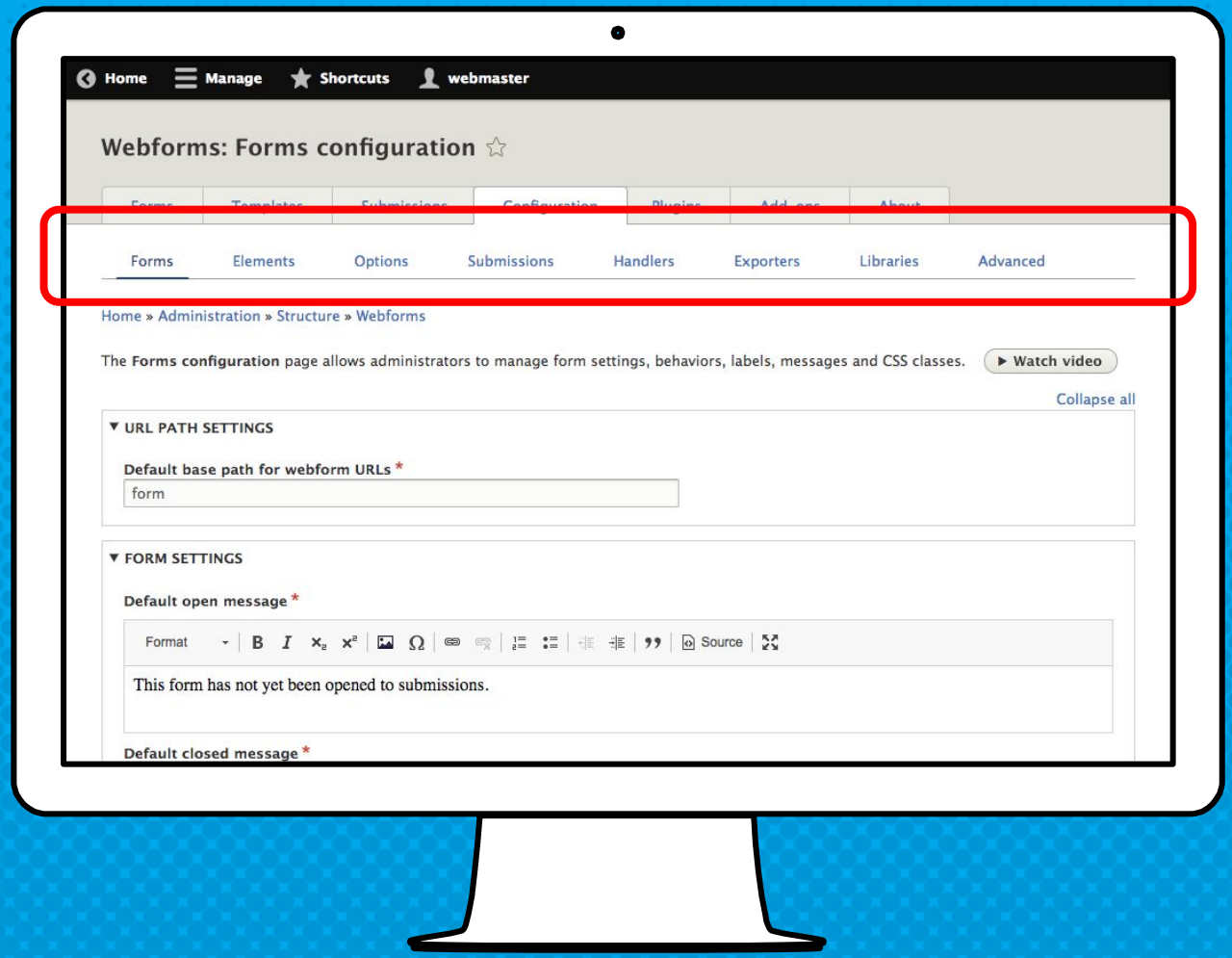
THERE IS CONFIGURATION FOR THAT

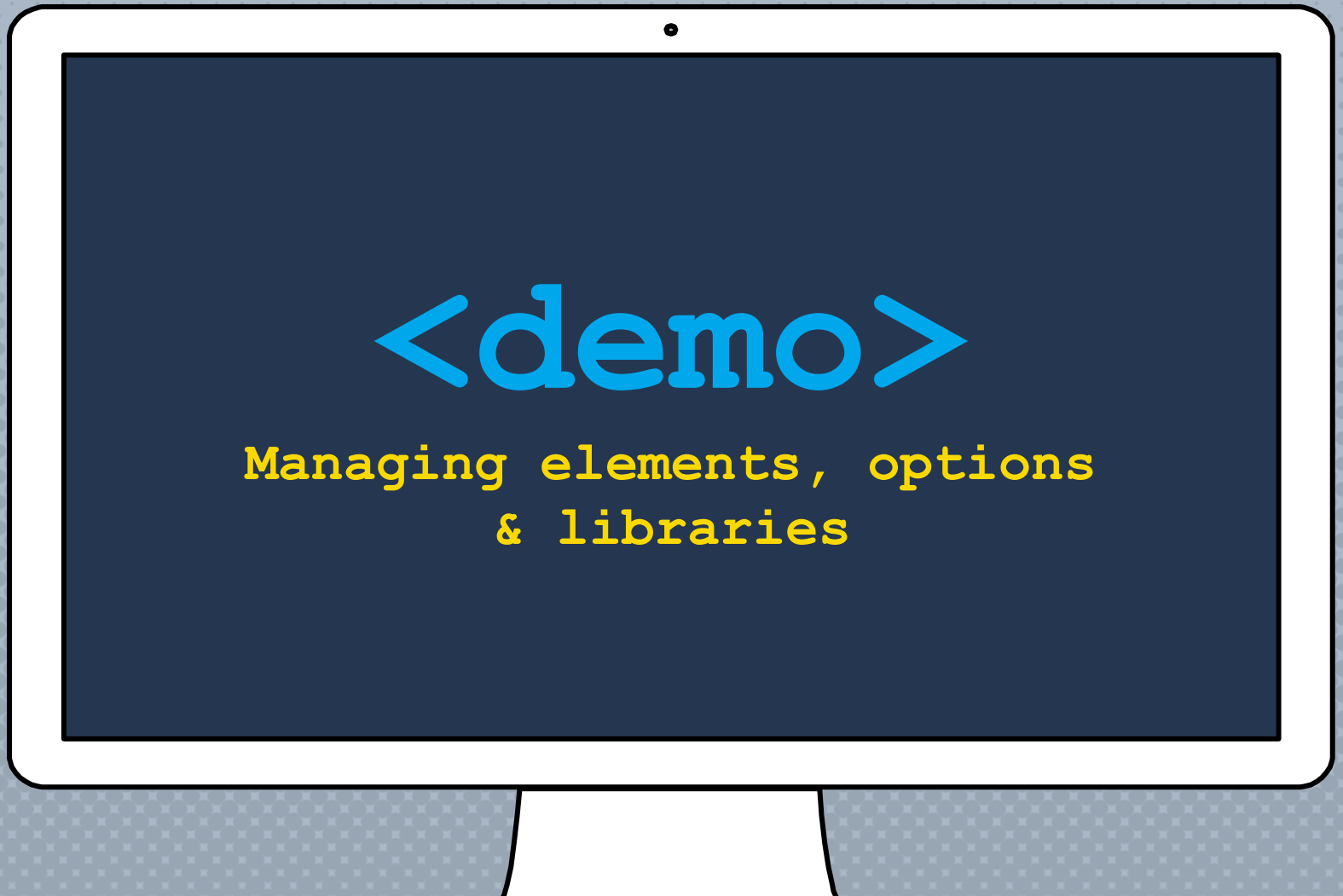
CONFIGURATION
DEFINES THE DEFAULT
FEATURES, FUNCTIONALITY,
& BEHAVIORS
AVAILABLE TO
ALL WEBFORMS

Things that should always be configured

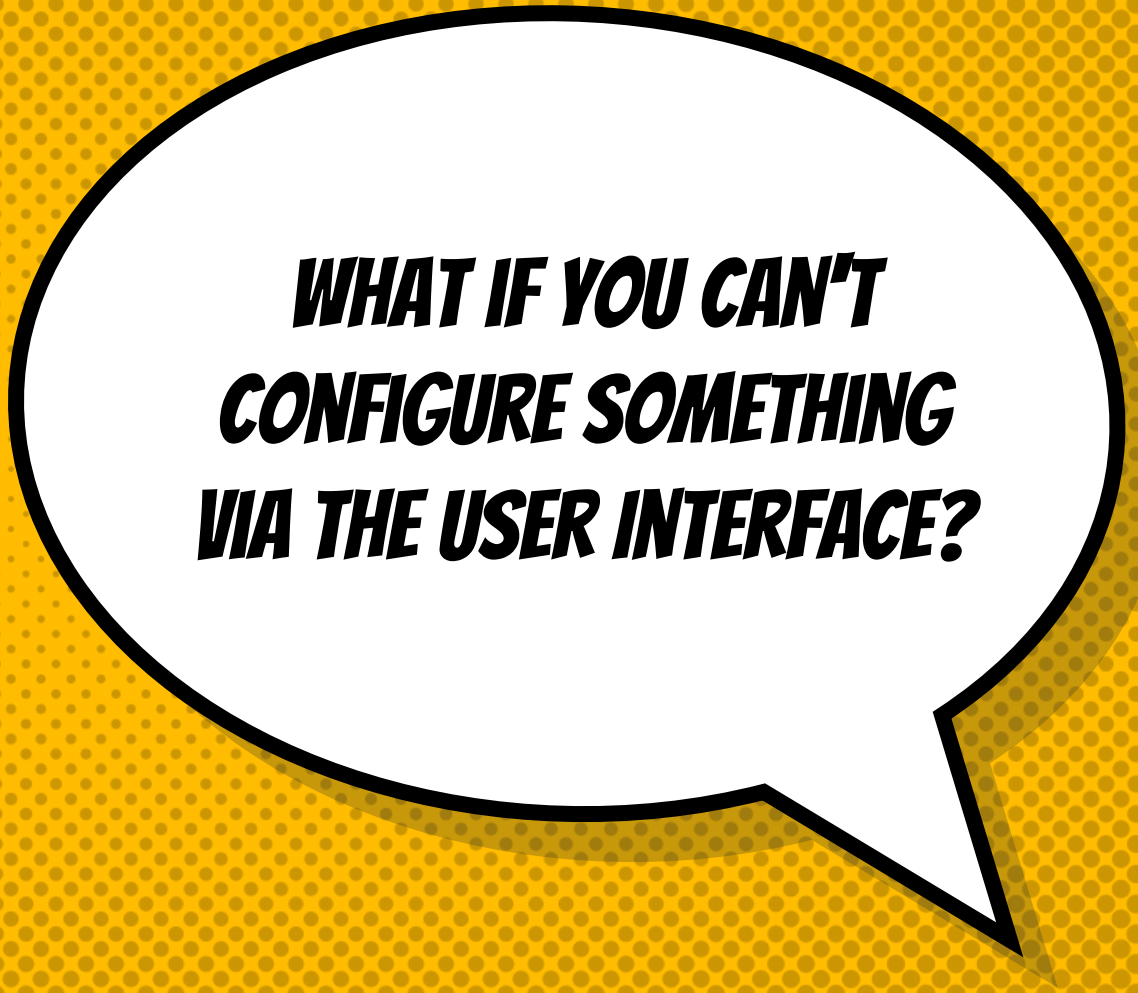
- × Private file access for file uploads
- × SPAM protection
- × Available elements
- × API keys
- × Reusable options

- x FORMS
- x ELEMENTS
- x OPTIONS
- x SUBMISSIONS
- x HANDLERS
- x EXPORTERS
- x LIBRARIES
- x ADVANCED



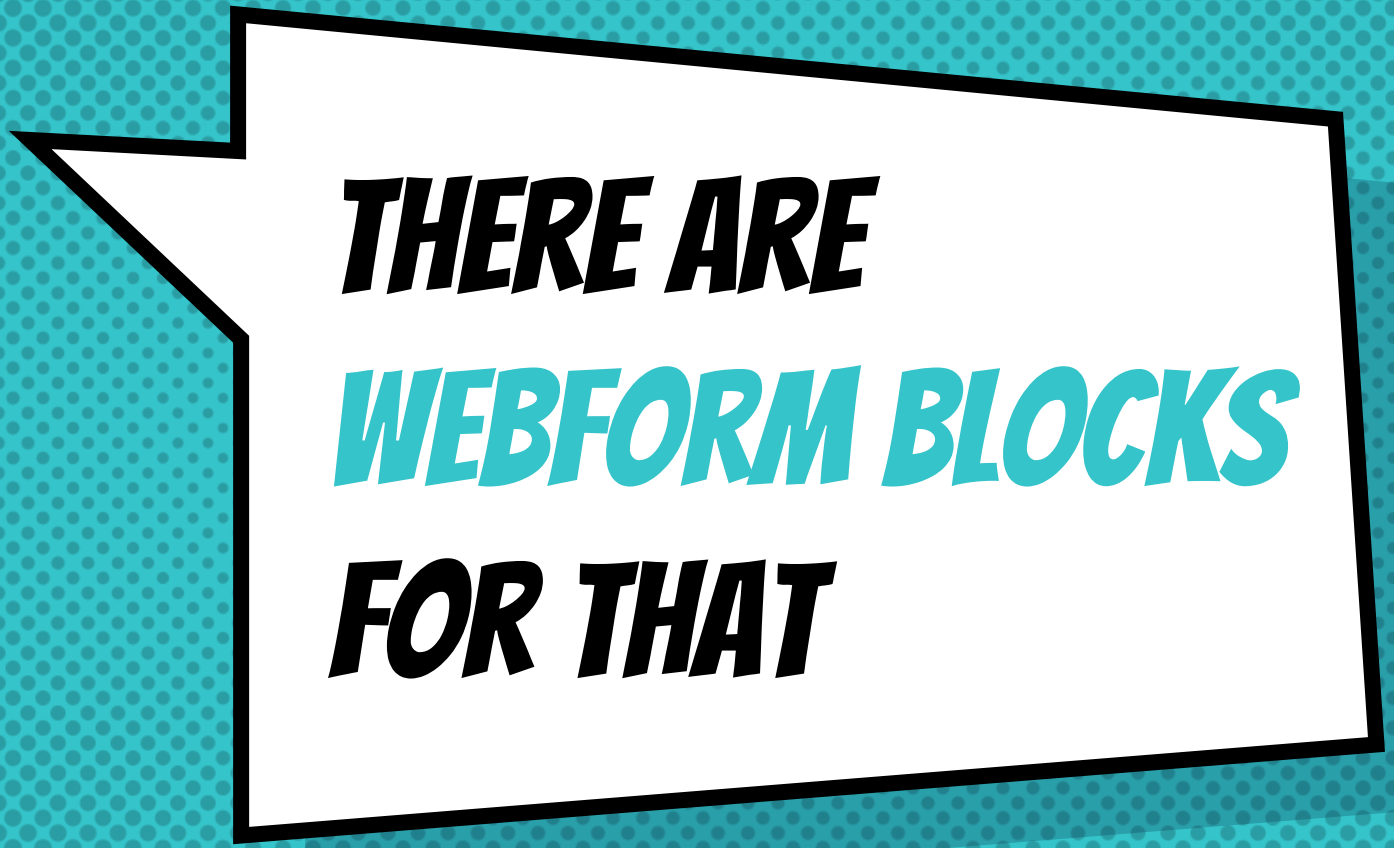

<demo>
Managing elements, options
& libraries

THERE IS A CONFIGURATION FOR THAT!!!


WHAT IF YOU CAN'T
CONFIGURE SOMETHING
VIA THE USER INTERFACE?

THERE IS A MODULE, HOOK, OR TEMPLATE FOR THAT!!!

How do you place a webform on your website?

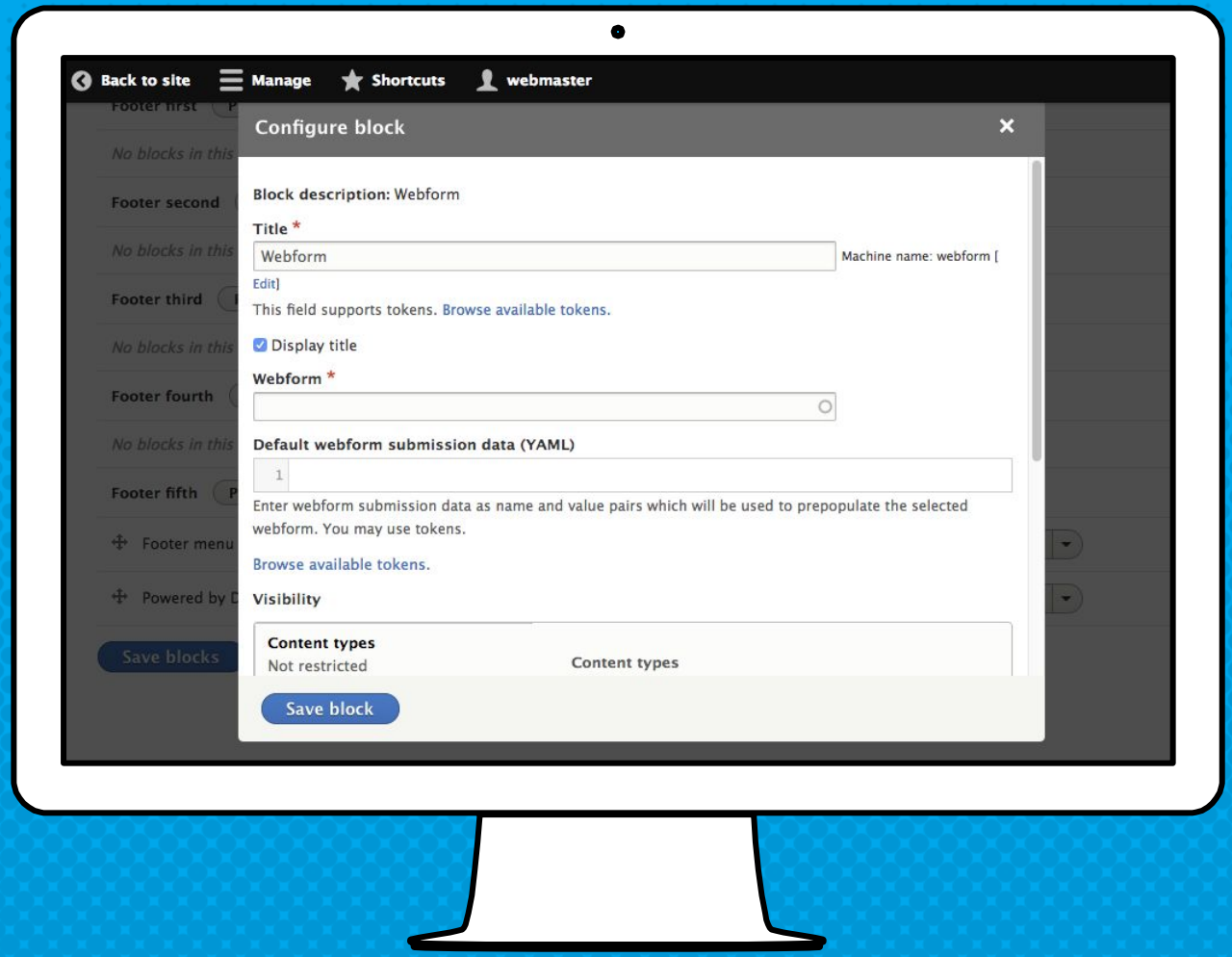

THERE ARE
WEBFORM BLOCKS
FOR THAT

WEBFORM BLOCKS ARE
BLOCKS THAT
DISPLAY A WEBFORM

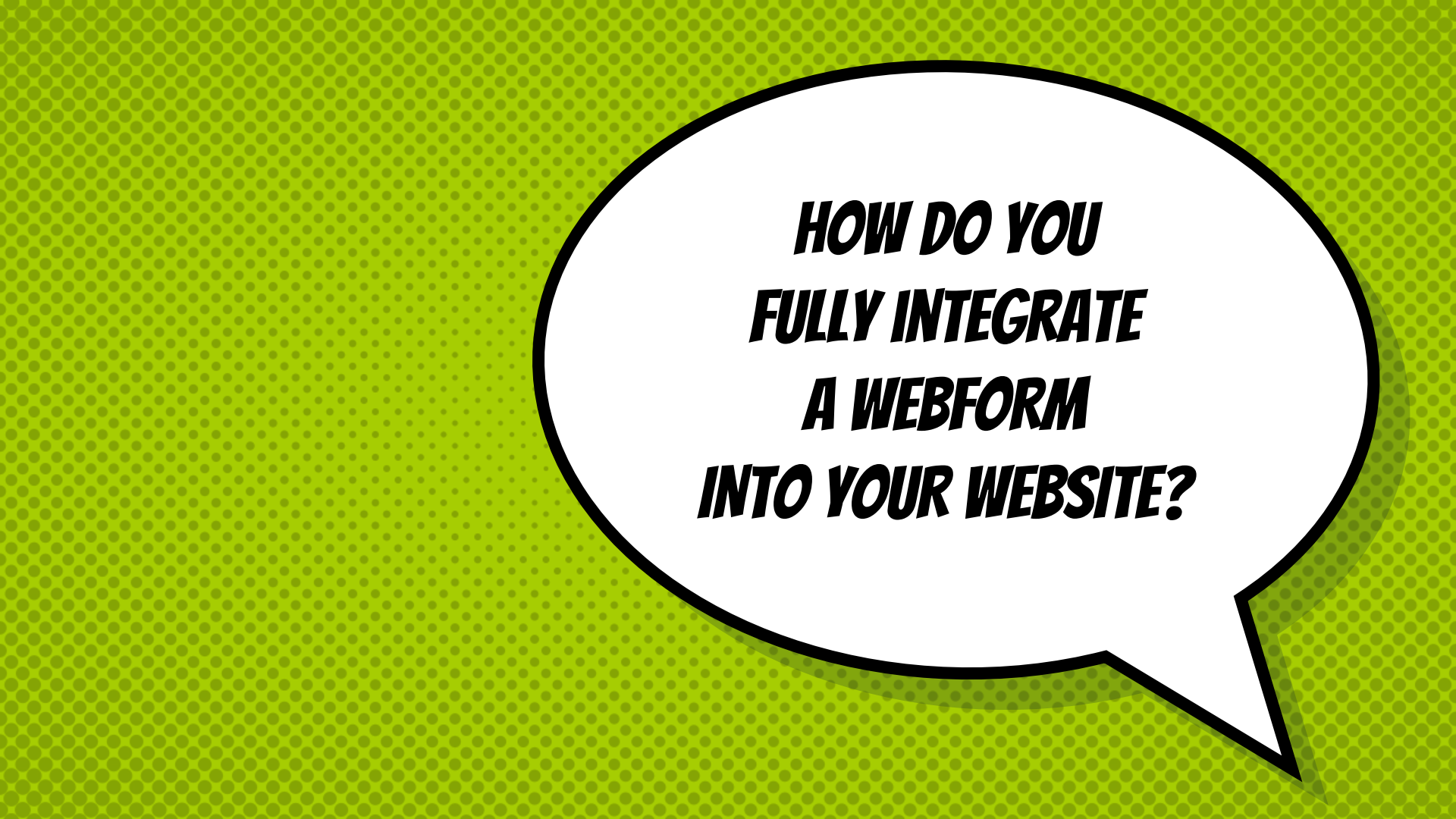
WEBFORM BLOCKS

- Make it easy to include a webform within layouts and panels
- Allow a webform to be placed anywhere on the page
- Allow a webform to be attached to any page on a website

A WEBFORM BLOCK CAN GO ANYWHERE



<demo>
Placing a webform block


HOW DO YOU
FULLY INTEGRATE
A WEBFORM
INTO YOUR WEBSITE?

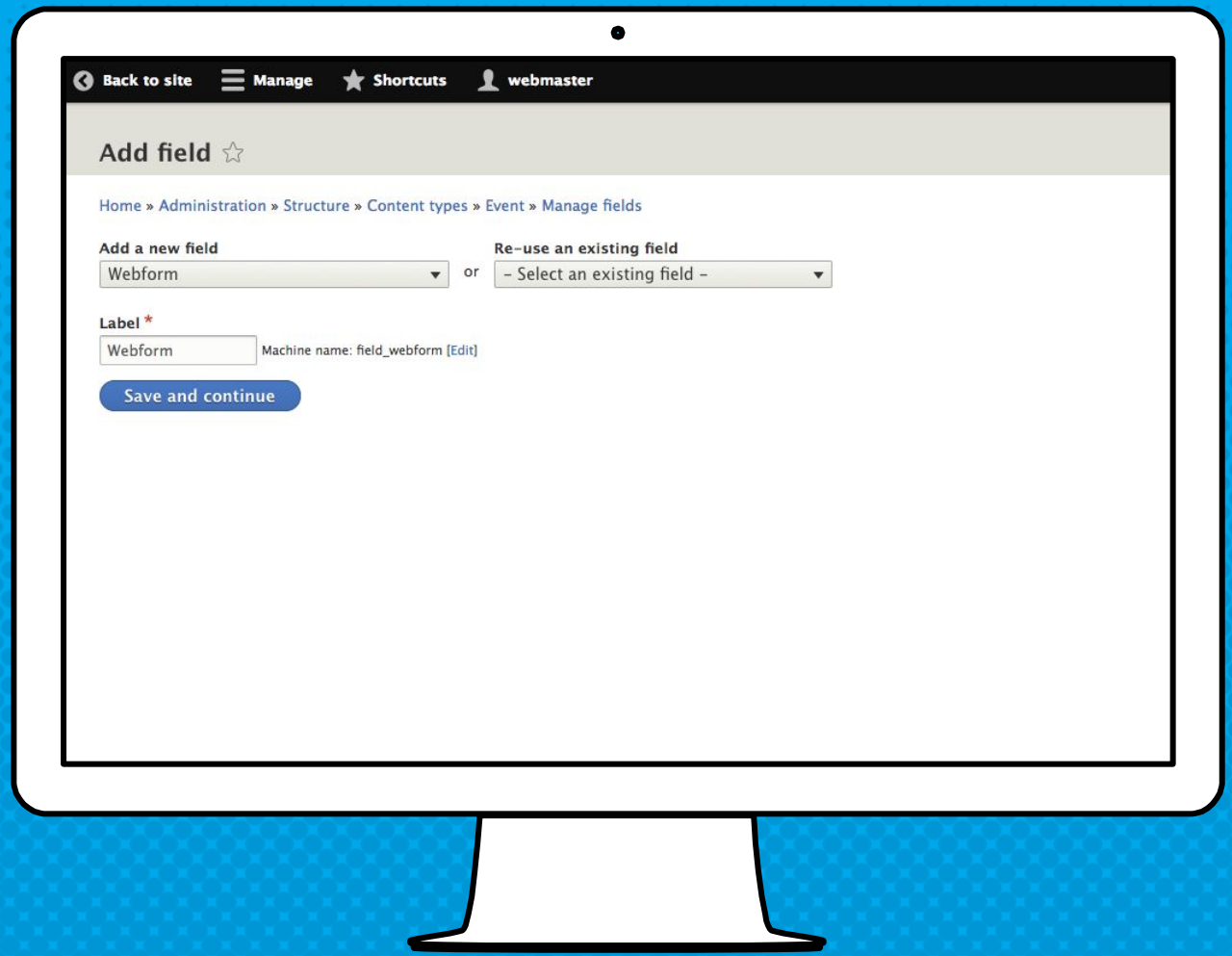
THERE ARE
WEBFORM NODES
FOR THAT

WEBFORM NODES
ARE NODES WITH A
WEBFORM FIELD
(ENTITY REFERENCE)
ATTACHED

The Webform Node Module

- Provides a webform content type
  Any content type can have a webform
- Tracks node specific submissions
  Adds 'Test' and 'Results' to node edit tasks (a.k.a. Tabs)
- Adds 'References' to the webform edit tab
  References tab track all webform node instances

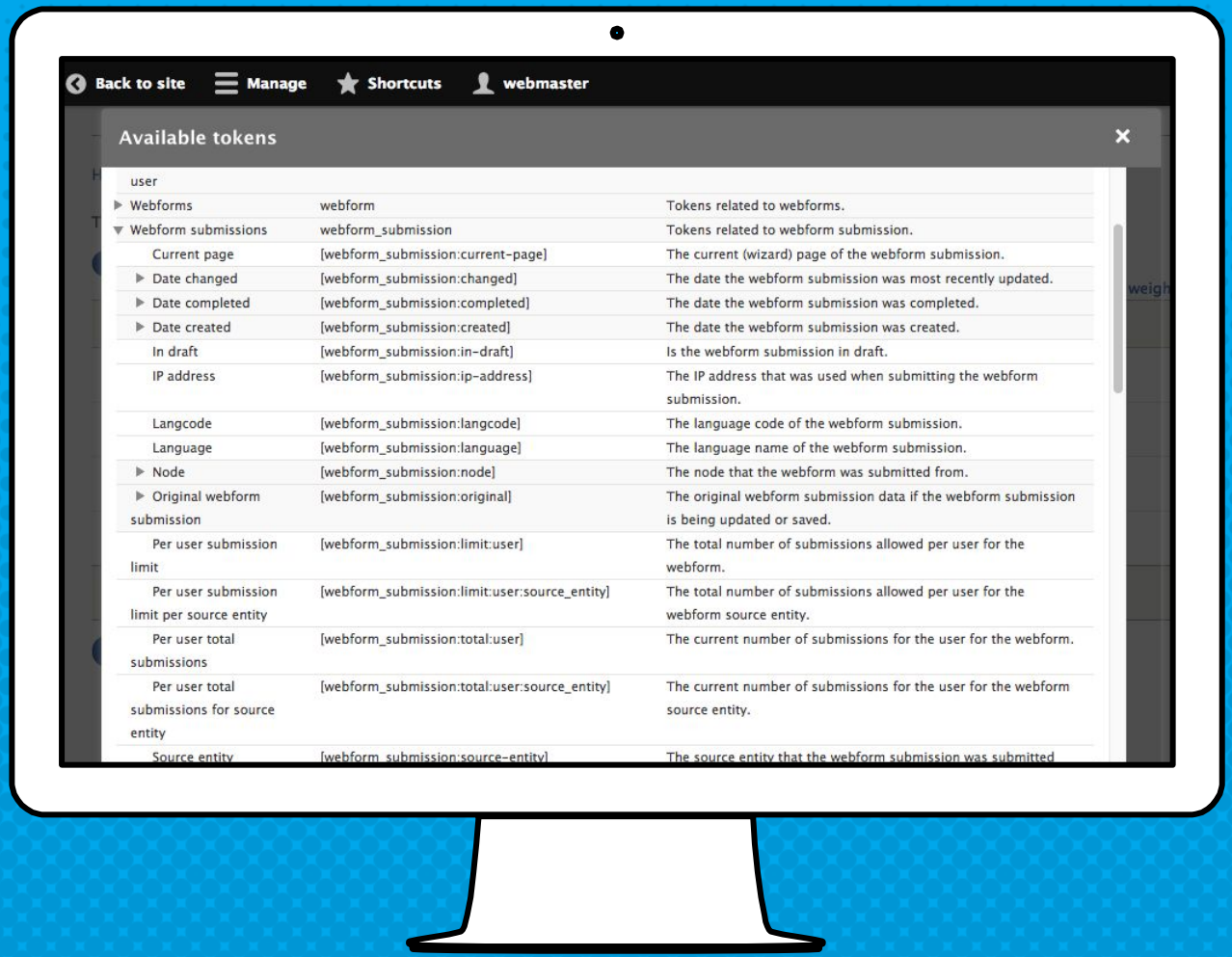
THE WEBFORM FIELD CAN BE ADDED TO ANY CONTENT ENTITY



Tips and tricks for webform fields & nodes

- Tokens can be used to pass node field values to webform settings
  `[webform_submission:node:field_confirmation_message]`
- Computed elements can also be used to display webform node values

WEBFORM TOKENS ARE VERY FLEXIBLE



user		
▶ Webforms	webform	Tokens related to webforms.
▼ Webform submissions	webform_submission	Tokens related to webform submission.
Current page	[webform_submission:current-page]	The current (wizard) page of the webform submission.
▶ Date changed	[webform_submission:changed]	The date the webform submission was most recently updated.
▶ Date completed	[webform_submission:completed]	The date the webform submission was completed.
▶ Date created	[webform_submission:created]	The date the webform submission was created.
In draft	[webform_submission:in-draft]	Is the webform submission in draft.
IP address	[webform_submission:ip-address]	The IP address that was used when submitting the webform submission.
Langcode	[webform_submission:langcode]	The language code of the webform submission.
Language	[webform_submission:language]	The language name of the webform submission.
▶ Node	[webform_submission:node]	The node that the webform was submitted from.
▶ Original webform submission	[webform_submission:original]	The original webform submission data if the webform submission is being updated or saved.
Per user submission limit	[webform_submission:limit:user]	The total number of submissions allowed per user for the webform.
Per user submission limit per source entity	[webform_submission:limit:user:source_entity]	The total number of submissions allowed per user for the webform source entity.
Per user total submissions	[webform_submission:total:user]	The current number of submissions for the user for the webform.
Per user total submissions for source entity	[webform_submission:total:user:source_entity]	The current number of submissions for the user for the webform source entity.
Source entity	[webform_submission:source-entity]	The source entity that the webform submission was submitted

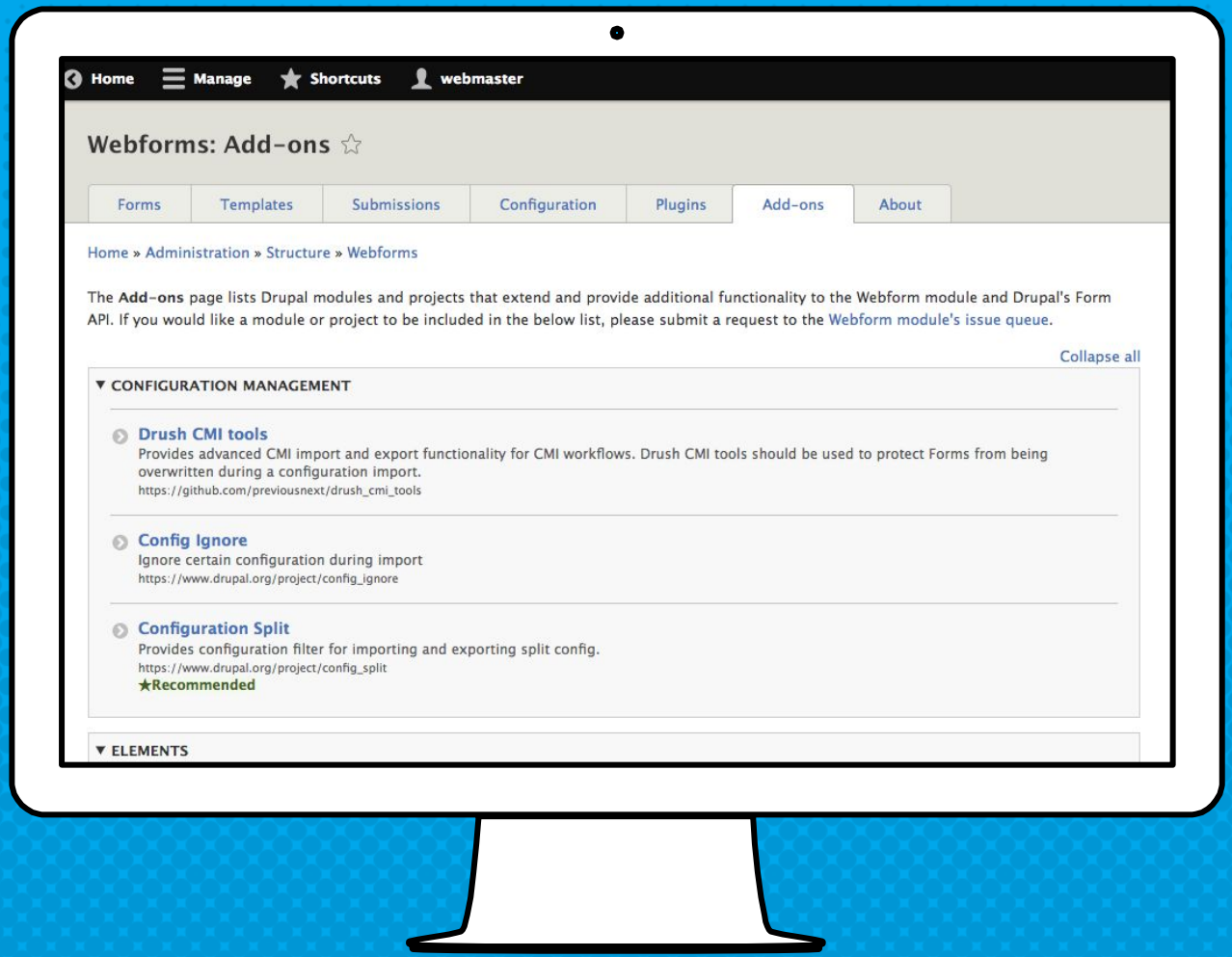
<demo>
Building webform nodes

HOW CAN YOU EXTEND THE WEBFORM MODULE?

THERE ARE
ADD-ONS
FOR THAT

ADD-ONS ARE
DRUPAL MODULES
& PROJECTS THAT
EXTEND & PROVIDE
ADDITIONAL FUNCTIONALITY
TO THE WEBFORM MODULE &
DRUPAL'S FORM API

THERE ARE A LOT OF USEFUL ADD-ONS AVAILABLE, & MORE TO COME...



TYPES OF WEBFORM ADD-ONS

- SPAM Protection
- Validation
- Elements
- Integration
- Submissions
- Mail
- REST
- Configuration
- Migrate
- Multilingual
- Workflow
- Development

Add-ons that improve user experience

- Honeypot
  Mitigates spam form submissions using the honeypot method
  https://www.drupal.org/project/honeypot

- CAPTCHA
  Provides CAPTCHA for adding challenges to arbitrary forms
  https://www.drupal.org/project/captcha

- Client-side Validation
  Adds client-side validation to forms
  https://www.drupal.org/project/clientside_validation

Add-ons that improve site builder experience

- IMCE
  IMCE is an image/file uploader and browser
  https://www.drupal.org/project/imce

- Webform Views
  Integrates Webform 8.x-5.x and Views modules
  https://www.drupal.org/project/webform_views

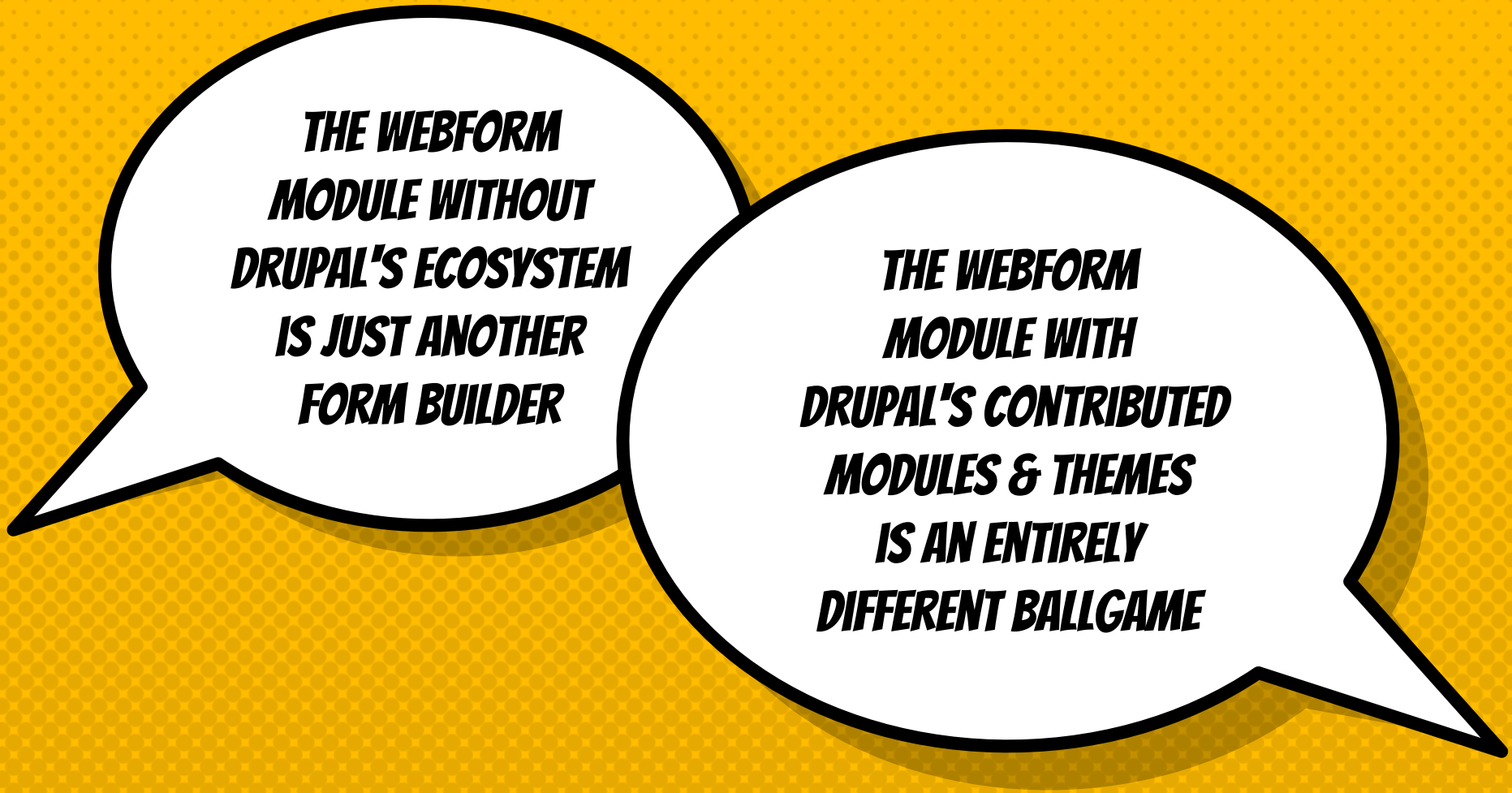
- Webform Analysis
  Used to obtain statistics on the results of form submissions
  https://www.drupal.org/project/webform_analysis

Add-ons that improve developer experience

- Webform Migrate
  Provides migration routines from d6, d7 webform to d8 webform
  https://www.drupal.org/project/webform_migrate

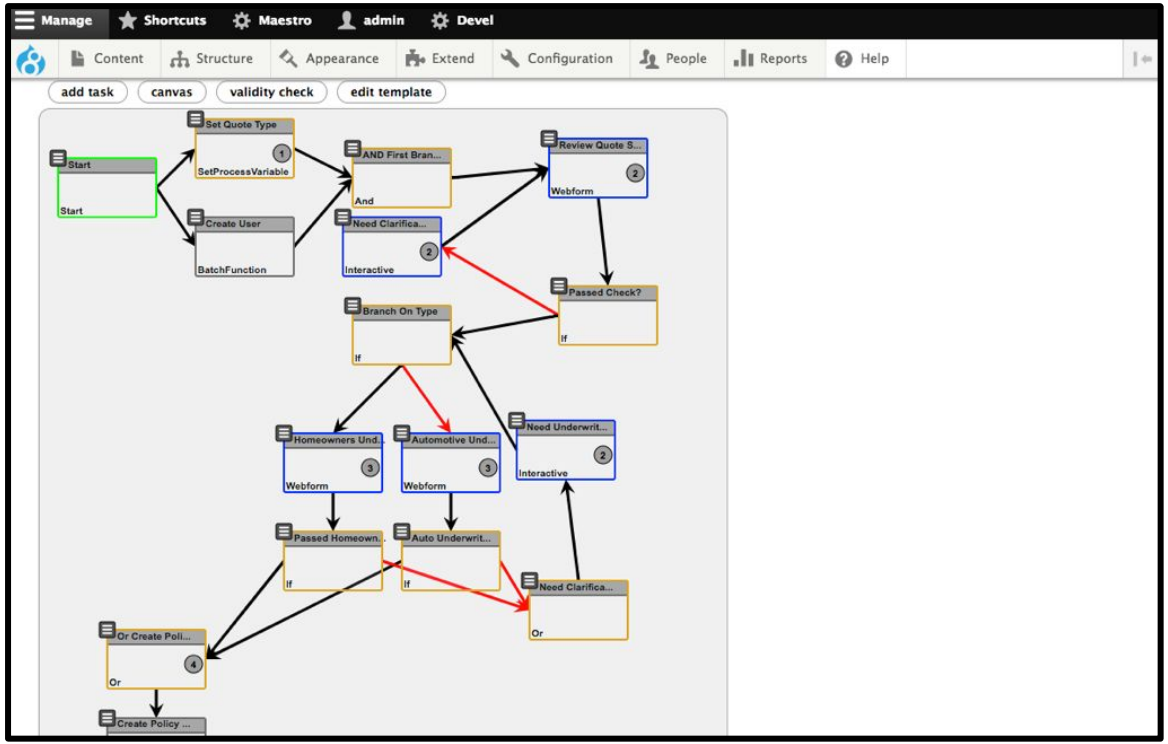
- Webform Composite Tools
  Provides a reusable composite element for use on webforms
  https://www.drupal.org/project/webform_composite

- Maillog / Mail Developer
  A utility to log all Mails for debugging purposes
  https://www.drupal.org/project/maillog

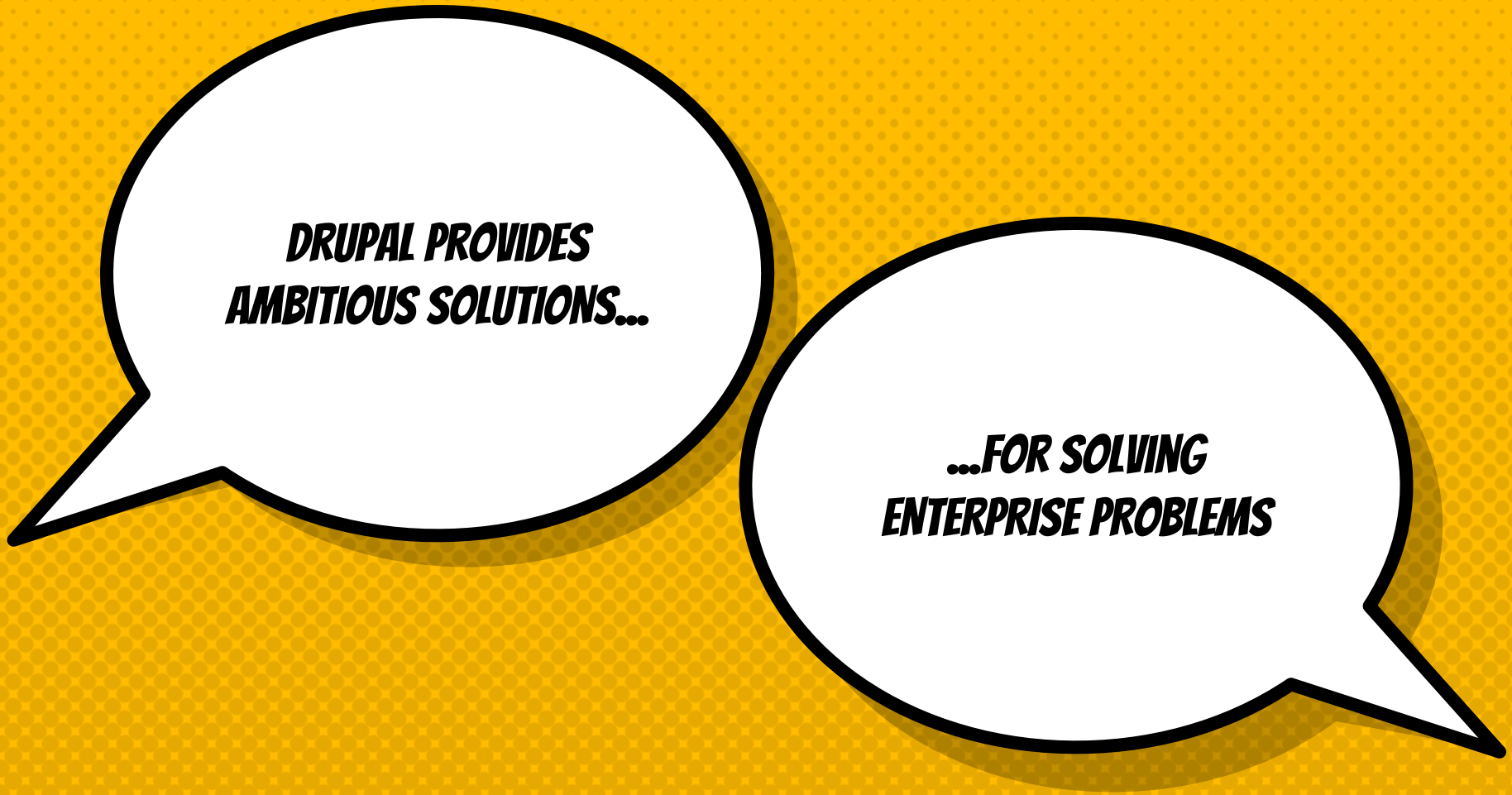

THE WEBFORM MODULE WITHOUT DRUPAL'S ECOSYSTEM IS JUST ANOTHER FORM BUILDER
THE WEBFORM MODULE WITH DRUPAL'S CONTRIBUTED MODULES & THEMES IS AN ENTIRELY DIFFERENT BALLGAME

MAESTRO WORKFLOW ENGINE

A BUSINESS PROCESS WORKFLOW SOLUTION



https://www.drupal.org/project/maestro


DRUPAL PROVIDES
AMBITIOUS SOLUTIONS...
...FOR SOLVING
ENTERPRISE PROBLEMS

THE DRUPAL COMMUNITY

The Drupal community's ability to provide contributed modules (and core) is the real power behind the Webform module.

THIS IS DRUPAL

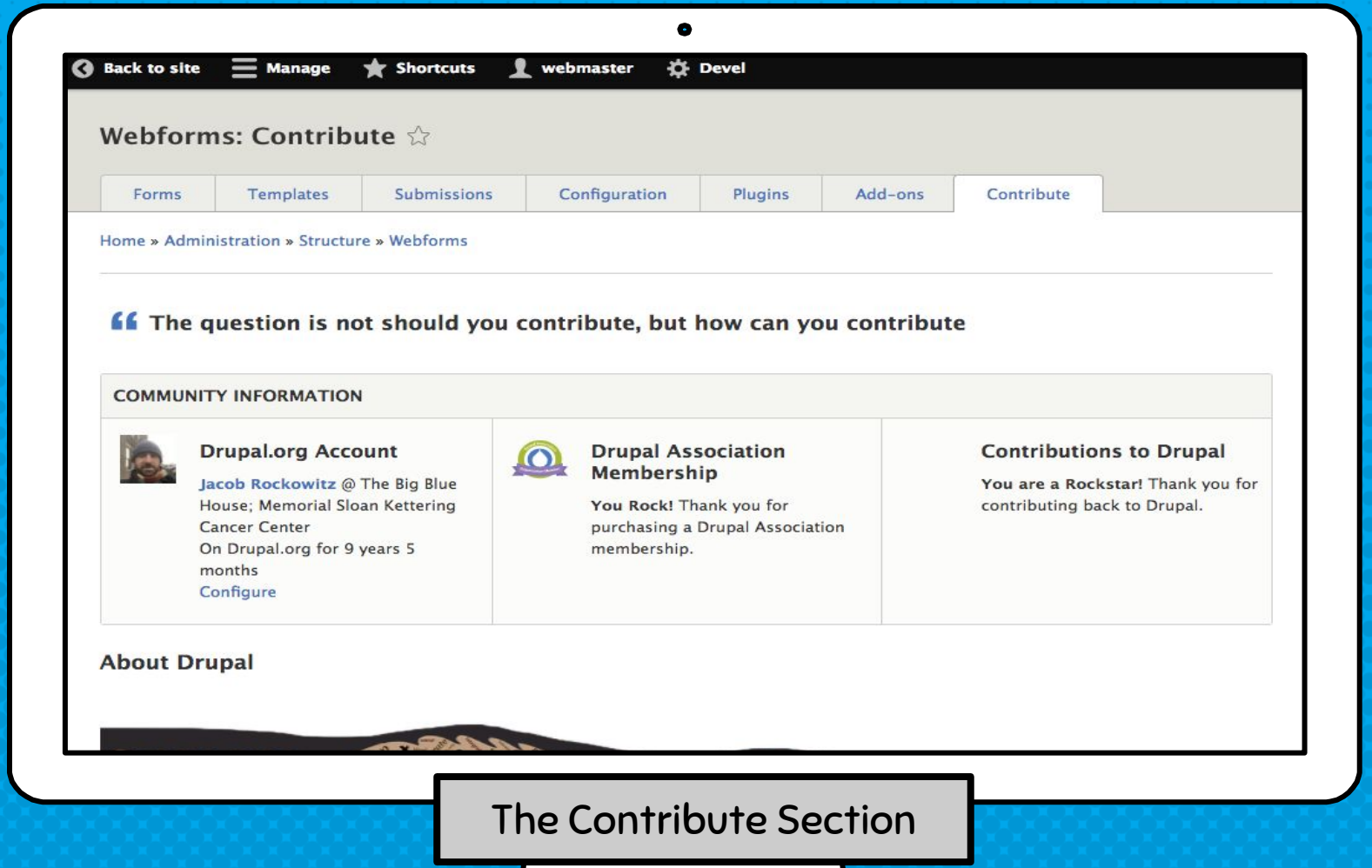
NOT SHOULD...
BUT HOW CAN YOU CONTRIBUTE

How can you contribute to the Webform module & Drupal?

THERE IS THE CONTRIBUTE SECTION FOR THAT

THE CONTRIBUTE SECTION ENCOURAGES PEOPLE TO

JOIN THE DRUPAL COMMUNITY, BECOME A MEMBER OF THE DRUPAL ASSOCIATION, & CONTRIBUTE TO DRUPAL



The Contribute Section

<demo>

WELCOME TO THE DRUPAL COMMUNITY
HI!
HOW CAN WE HELP YOU?
HERE IS HOW YOU CAN GET INVOLVED

WHERE CAN YOU GET HELP & LEARN MORE?

THERE IS MORE INFORMATION ABOUT...

Connecting with me

- Jacob Rockowitz (Blog)
  http://jrockowitz.com

- jrockowitz on Drupal.org
  https://www.drupal.org/u/jrockowitz

- jrockowitz on Twitter
  https://twitter.com/jrockowitz

The Webform Module

- Documentation, Cookbook, & Screencasts
  https://www.drupal.org/docs/8/modules/webform

- Drupal Answers
  http://drupal.stackexchange.com

- Webform Issue Queue
  https://www.drupal.org/project/issues/webform?version=8.x

The Drupal Community

- Drupal Association (Membership)
  https://www.drupal.org/association

- Drupal Planet (Blogs)
  https://www.drupal.org/planet

- Drupal Newsletter (Email)
  https://www.drupal.org/association/newsletter

ARE WE DONE YET?

RALPH SAYS...

YES!!!

ANY QUESTIONS?

DrupalCon
NASHVILLE 2018
APRIL 9-13
Join us for
contribution sprints
Friday, April 13, 2018
Mentored
Core sprint
9:00-18:00
Room: 103
First time
sprinter workshop
9:00-12:00
Room: 101
General
sprint
9:00-18:00
Room: 104
#drupalsprint

What did you think?

Locate this session at the DrupalCon Nashville website:

http://nashville2018.drupal.org/schedule

Take the Survey!

https://www.surveymonkey.com/r/DrupalConNashville