

**EPICOR®**

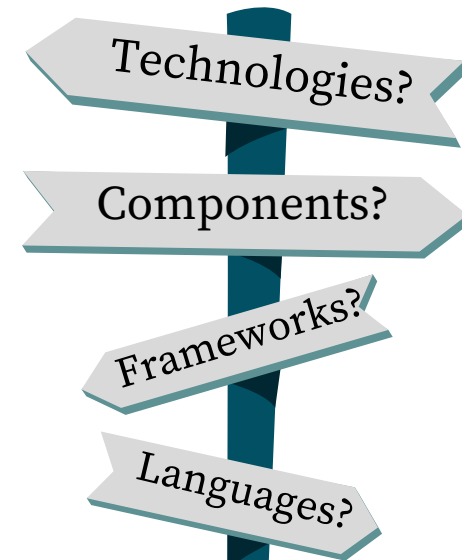
# **An overview of the Epicor Kinetic Framework**



# **Introduction & History**

# “Past history hasn’t always been so easy to make choices...”

- What do we use to build both web and mobile applications?
- Do we use open-source components vs. licensed components?
- What frameworks are going to stand the test of time?
- Which languages align with our direction and skillsets?



# Framework History

## Mix of Technologies / Approaches

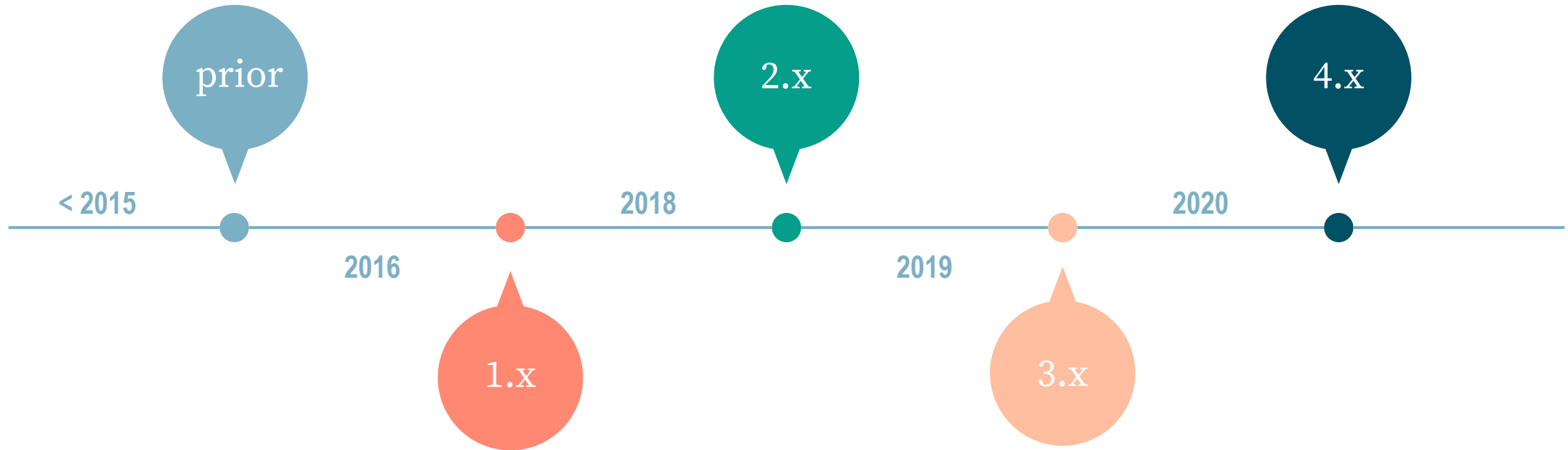
Use of many various technologies and approaches trying to solve browser & mobile applications within Epicor.

## Kinetic Framework 2.x

2<sup>nd</sup> generation UI framework on Angular 5, Kendo UI components, and TypeScript.

## Kinetic Framework 4.x

4<sup>th</sup> generation UI framework that supports extensibility, modules, customizations, and personalizations.



## Epicor Mobile Framework (EMF)

1<sup>st</sup> generation UI framework on HTML, Angular 1, Bootstrap, JavaScript, and Open-source UI components, and a Hybrid strategy for mobile.

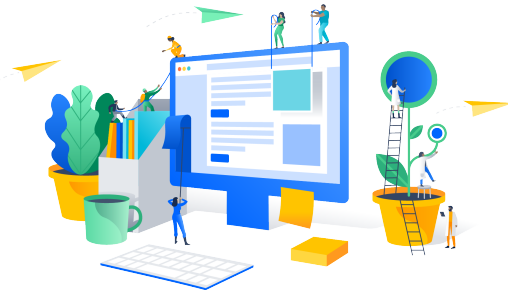
## Kinetic Framework 3.x

3<sup>rd</sup> generation UI framework that supported the first formal Kinetic design from PDX.

# What is Kinetic?

## Design System

A system that defines how the typography, colors, layouts, and UI components behave. It incorporates the Epicor brand.



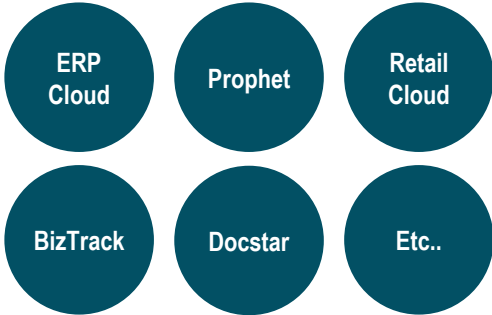
## UI Framework

The UI framework is used by developers to build applications. The framework adheres to the Kinetic Design system out of the box.



## Cross-Platform Framework

Standard UI framework for building applications across all platforms within Epicor.



# Technically, how does it work?

## Industry Technologies

Kinetic uses industry standard technologies, frameworks, and UI components.



## Deployed to NPM

The Kinetic framework is versioned, compiled, and deployed to our Epicor NPM artifacts for consumption.



## Browser, Hybrid & Mobile Apps

Kinetic applications can be deployed as browsers apps, desktop apps, or mobile apps.



Browser Applications



Auto Updated / Desktop Applications



Store Downloaded / Mobile Applications

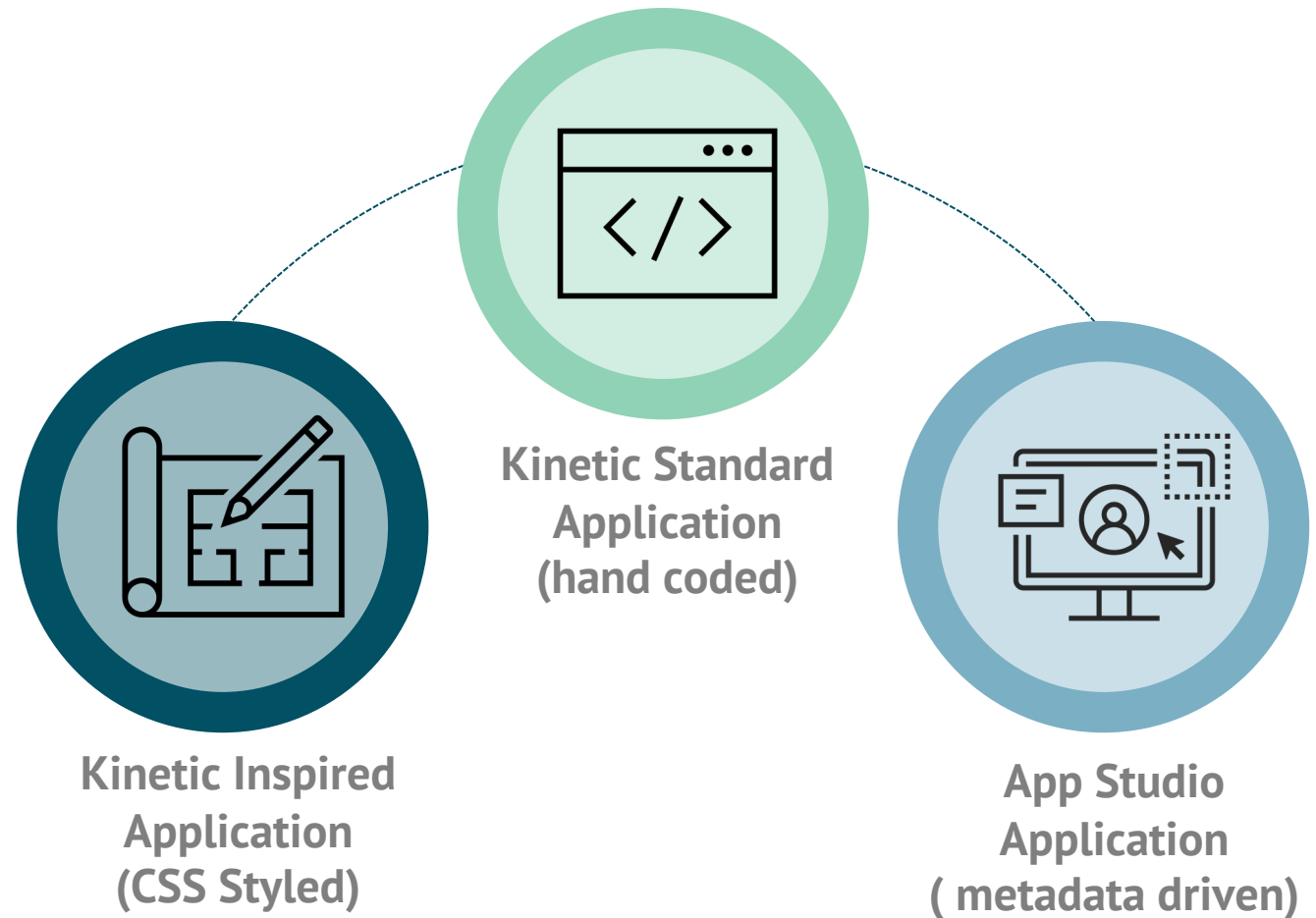


# Kinetic is integrating to everything!

We are seeing more and more Kinetic applications that are integrating to everything from geolocation and camera access, high-speed scanners and card scanners, printers and health and monitoring APIs, to machine learning and AI.

# Kinetic Application Types

There are several types of Kinetic applications that are being created within Epicor. Adopting Kinetic, to its fullest capabilities, depends on the platform's technology position.





# The Kinetic Team



## **Kinetic Product Design Team (PDX)** **Director / PO – Chris McCurry**

This team is responsible for all aspects of the Kinetic design inside of the framework. Fonts, colors, and layout patterns. This team implements the **Epicor brand** for the framework.



## **Kinetic Framework Team** **Director / PO – Brian Conner**

This team is responsible for the engineering and delivery of the Kinetic Core framework ,and Kinetic App Studio.



## **Kinetic Mobile DevOps Team** **Owner - Ragam Ramachandran**

This team is responsible for helping engineering teams create CI/CD pipelines for their products. This team has expertise in preparing applications for delivery to the Apple and Android app stores.

# Our Services



## Platform Apps Onboarding

The Kinetic team will help your team get up to speed on the framework so they can start building applications quickly.



## Design & Framework Consulting

The Kinetic team can consult with your team on design ideas for your applications and help your developers utilize the framework features properly from the beginning.



## Best Practice Recommendations

The Kinetic team can recommend best practices depending on the requirements of your application.



## Feature Planning Support

The Kinetic team can help you plan new features in Kinetic that your application depends on. We will work with your team to ensure proper delivery of the features to meet your deadlines.



## Code Reviews

The Kinetic team can help provide code reviews for your team to ensure things are being developed appropriately to standards for solving your requirements.



## Developer Help

The Kinetic team provides help to get defects fixed and enhancements submitted and prioritized for the Kinetic releases.

# Features & Capabilities

# Framework Core Elements



## Design System

Provides standards on fonts, colors, terminology, layouts, and more



## Application Shell

The core application shell provides authentication, routing, home page, slide out panels, menus, etc.



## Component Library

The core UI components that are used to build out the user interfaces



## Plugin Layer

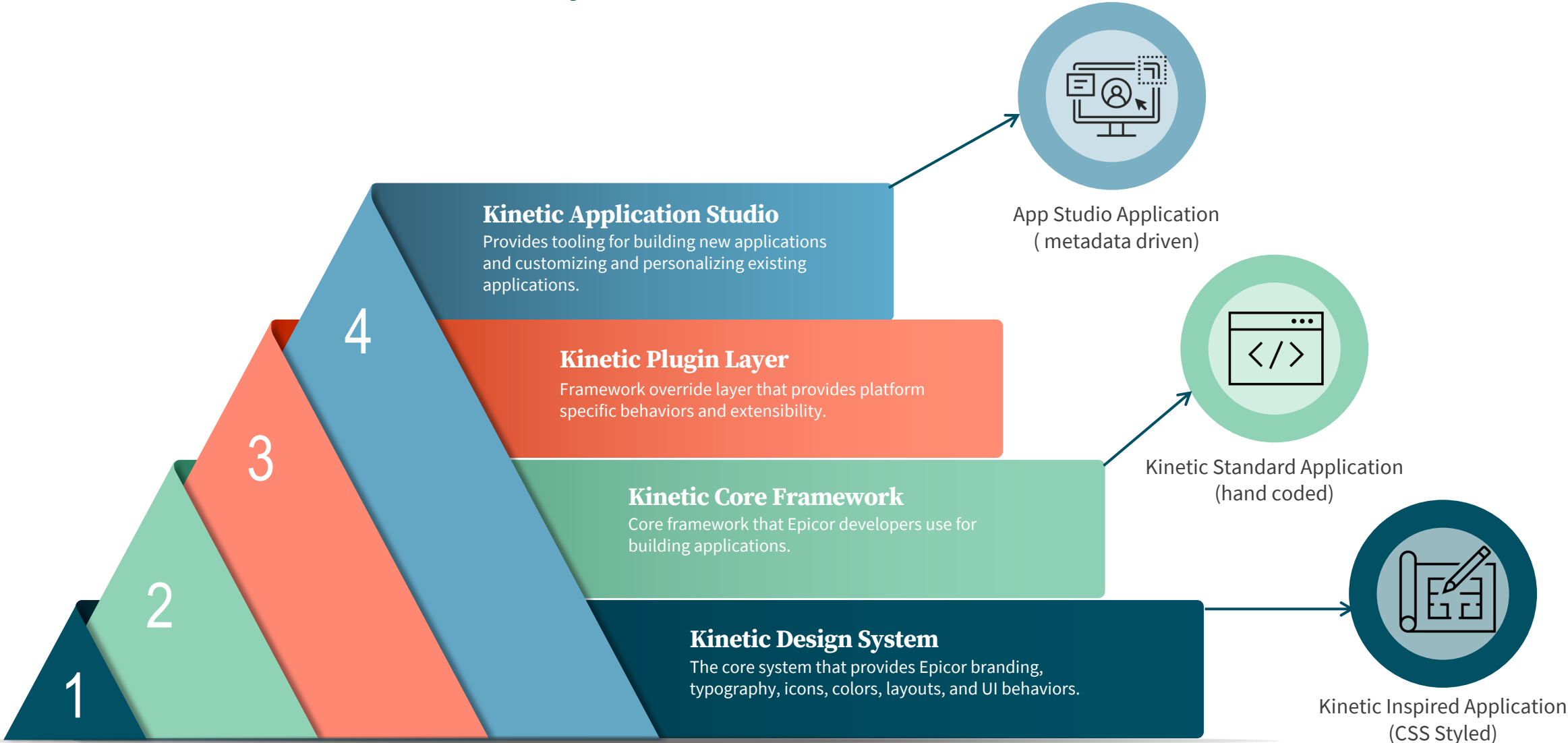
A standard way to create a layer to extend Kinetic framework for specific platform requirements



## Application Studio

Epicor's designer used for building web and mobile applications with customizations and personalizations

# Kinetic Framework Layers



# What do you get out of the box?

01

## Responsive Shell

Kinetic provides a responsive shell that contains left and right sidebars, navigation patterns, and is responsive across form factors.

02

## Menu Bar / Panels

Kinetic provides a menu bar on the left side of the shell that provides a standard menu, favorites, recents, help & support, user preferences, notifications, and more.

03

## Login & Session Management

Kinetic provides a login that supports many different authentication methods including Epicor Token v1, Azure AD, Epicor IdP, and Custom.

04

## UI Component Suite

Kinetic provides a strong set of UI components that are built on the foundation of the Telerik Kendo UI components.

05

## REST Services

Kinetic provides automatically configured REST services that can talk to your backend system for access to business logic and data.

06

## DataViews & Data Binding

Kinetic provides DataViews and Binding to allow your application to interact with your data.

07

## Mobile Components

There are several mobile components that provide features like geolocation, camera and photos, barcode scanning, media access, and more.

08

## Kinetic Angular Services

Kinetic provides a large set of utility services including internationalization, localization, telemetry, and more.

09

## Developer Standards

Kinetic provides developer standards on how to build applications, implement coding standards, and provides a framework for builds and deployments.

# The Kinetic Shell

The Kinetic Shell provides the core foundation for any applications built with the Kinetic framework.



## UI Alignment across Epicor

The Kinetic shell provides a standard in aligning all applications within Epicor to the Kinetic Design system.



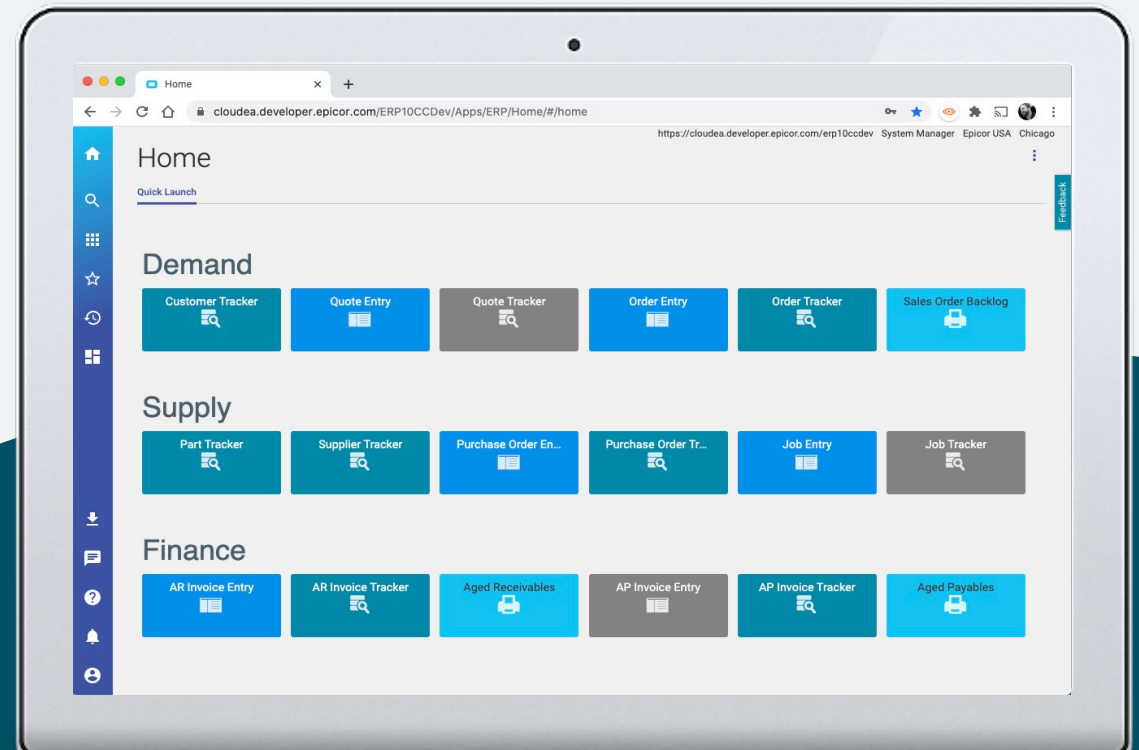
## Application Framework

The Kinetic shell provides many features out of the box like the menu bar, favorites, sliding panels (left / right) and a responsive design that scales to mobile.



## Standard Home Page

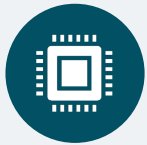
The home page offers a flexible, grid-based layout, for placing UI components that represent important information for your users.



# Mobile Features

## Kinetic works with Cordova for native mobile features

Although Kinetic is a web-based architecture based on HTML5, CSS, and Angular it also can be used with Cordova plugins for native hardware access on both iOS and Android devices.



### Native Hardware Access

Kinetic applications can access native hardware functionality through Cordova plugins.



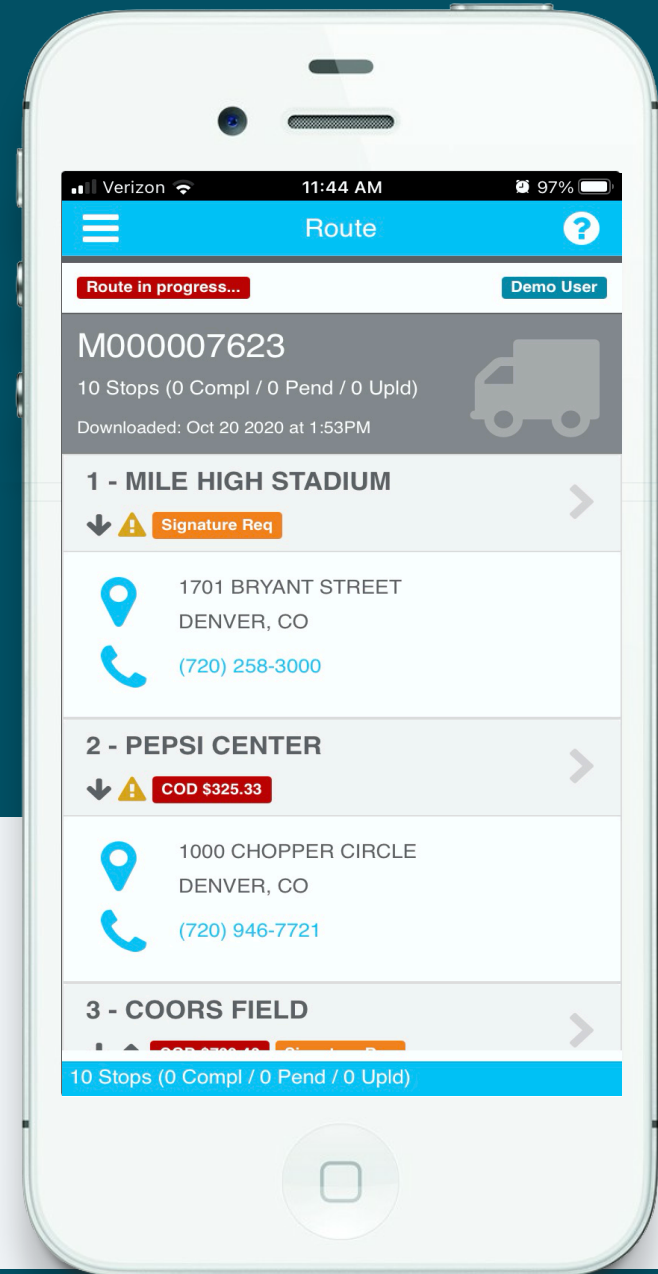
### Single Codebase

Kinetic are a single code base that can be run in the browser and on mobile devices. Harness your web developers' skillsets for



### Many Mobile Plugins

Cordova has many plugins for mobile application development. This can help advance the mobile capabilities of your application.





# Release Cadence & Upgrades

# Kinetic Version Policy

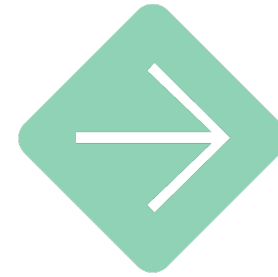
- Kinetic follows [Semantic Versioning](#) policies
- All versions can be found on our NPM feed - <http://epicornpm:4873/>
- MAJOR.MINOR.PATCH (x.x.x)
  - MAJOR version when you **make incompatible changes** to the framework.
  - MINOR version when you **add functionality in a backwards-compatible manner**.
  - PATCH version when you make **backwards-compatible bug fixes**.

# Kinetic Release Cadence



## Previous Versions

Critical Bugs - Every 2 weeks



## Current Version

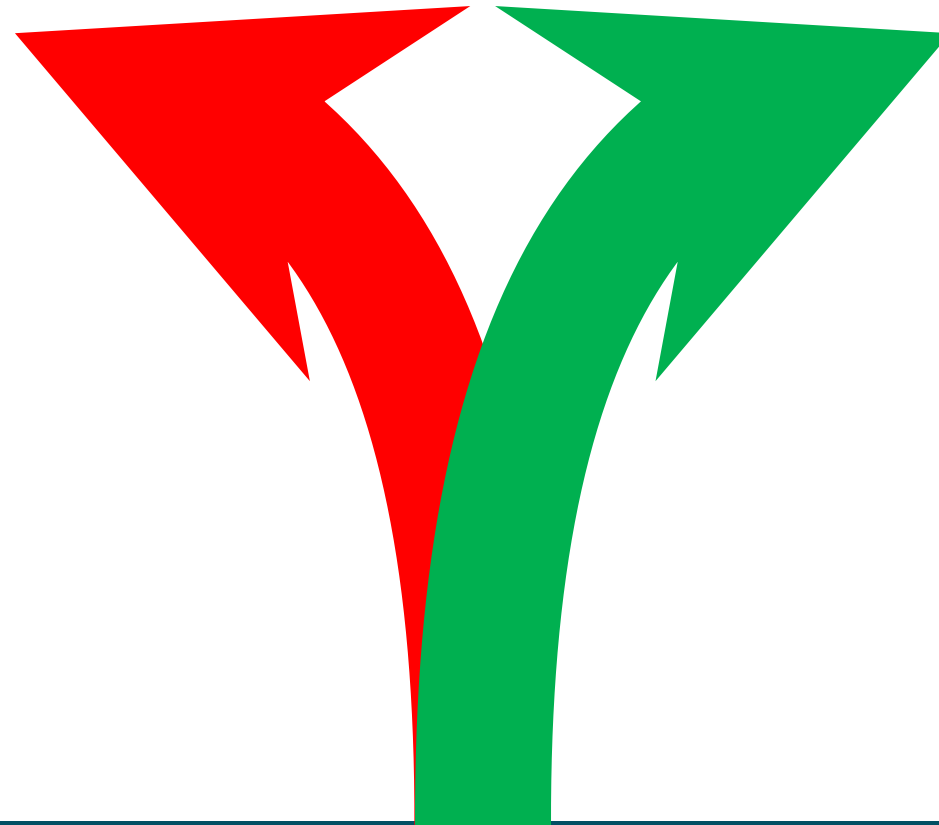
Critical Bugs – Every 2 weeks  
Enhancements – Every 2 weeks

We encourage everyone to try to stay on the latest minor version of a release...

# Upgrade Procedure

## Rollback Capable

If your team finds that a newer version has some issue for your application, you can easily just rollback to the previous version and work with the Kinetic team to figure out a path forward.



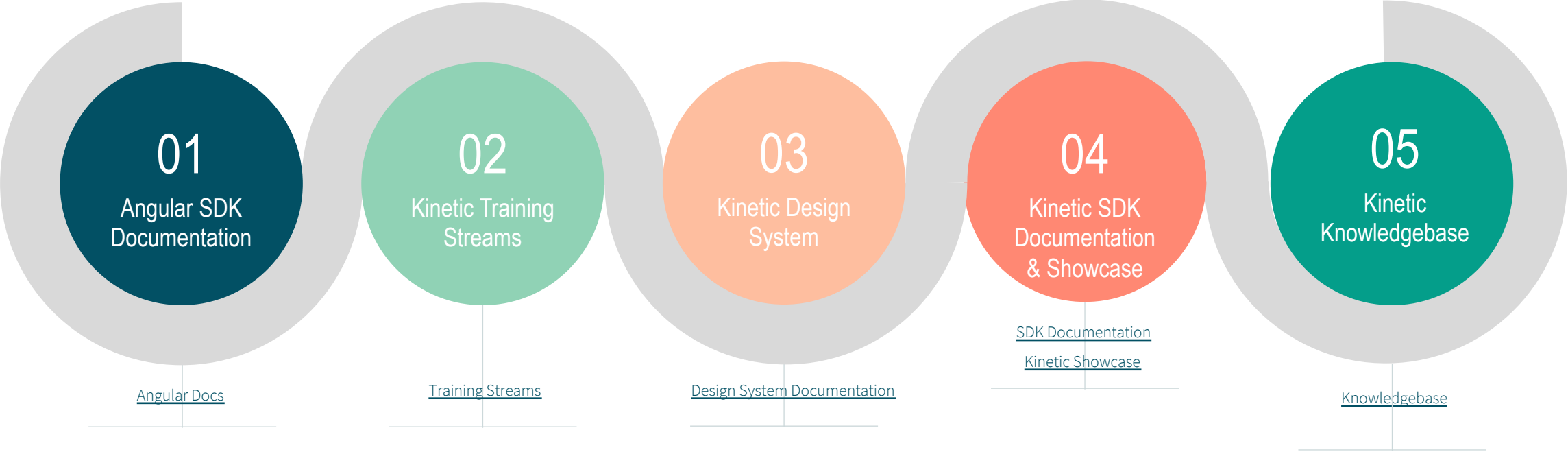
## On-demand Upgrades

At anytime you can upgrade your Kinetic application to a newer version and test it out.

We recommend reading thoroughly through the release notes and follow any upgrade procedures.

# Documentation & Training

# Kinetic Training Resources



## Learn Angular

Learning Angular is the first step to be successful with Kinetic

## Learn Kinetic

Use these videos to become familiar with the Kinetic architecture and application concepts

## Understand Kinetic Design

Learn how the design system impacts how the framework manifests itself

## Understand Components

Learn about the many different UI components and services offered by the framework

## Get Answers

Search the knowledgebase for answers on things other developers have already run into

# Developer Help



### Knowledge Base

Search for answers in our knowledgebase from working with other developers.



### Yammer Channel

Get help by posting questions to our live Yammer channel to get live interaction from the Kinetic team.



### Kinetic Requests

Submit a request for defects and feature enhancements to the Kinetic triage team.



# Global Help

## Many choices to get help!

Developers have a few different choices when it comes getting support from the Kinetic team. Each channel offers a different level of support.