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How to build a Grid system:

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A grid is made of multiple components (see below)

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Types of Grids:

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- Public Grid (Shared community grids)

- Private Grid (User specific grid)

- Remember Mobile-friendly Grids

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A specific Grid Component:

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- Each component is a card

- Each component represents a different use case

- Each component is a fundamental piece of configurable functionality that allows an end-user to compose a layout

- Asepcts of a Component

-- A/B Size (Dimensions - width/height)

-- Title

-- Maximize Icon - Display fullscreen view of the component

-- Refresh Icon (indicates the freshness of the data)

- Each component is reactive

- Compnents check a checksum hash

- Components display a visual timestamp to indicate update time

- Refresh icon changes color to indicates status (stale quality of data, updating status, up-to-date)

-- Kebab icon

- Indicates more Info

- Indicates help feature

- Indicates modification options

- Allows for modifcation of dimension attributes

- 'Drill-in' or 'More Details' for a robust version of the component

- Some components import functionality through the use of iFrames or WebComponents

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Technical Details:

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Framework OPTION 01 - Angular 10+

Angular Gridster 2 (https://tiberiuzuld.github.io/angular-gridster2/)

Angular Material (https://material.angular.io/)

Framework OPTION 02 - React 17+

React-Grid-Layout (https://react-grid-layout.github.io/react-grid-layout/examples/0-showcase.html)

React Bootstrap (https://react-bootstrap.github.io/)

- DataViz Options

-- d3.js

-- nvd3

-- ngx charts (wrapper library for D3)

- Map Options

-- Open Layers 4 (Mapping Library)

-- NG Maps or ArcGIS (Serves Map Data)