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[react-beautiful-dnd](#) / [docs](#) / [guides](#) / **types.md**

alexreardon fixing outdated references to data attributes ✓



2 contributors



229 lines (194 sloc) | 5.81 KB

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Types

react-beautiful-dnd is typed using [flowtype](#). This greatly improves internal consistency within the codebase. We also expose a number of public types which will allow you to type your javascript if you would like to. If you are not using `flowtype` this will not inhibit you from using the library. It is just extra safety for those who want it.

Public flow types

Ids

```
type Id = string;
type TypeId = Id;
type DroppableId = Id;
type DraggableId = Id;
```

Responders

```
type Responders = {
  // optional
  onBeforeCapture?: OnBeforeCaptureResponder,
  onBeforeDragStart?: OnBeforeDragStartResponder,
  onDragStart?: OnDragStartResponder,
  onDragUpdate?: OnDragUpdateResponder,
```

```

    // required
    onDragEnd: OnDragEndResponder,
  |});

type OnBeforeCaptureResponder = (before: BeforeCapture) => mixed;
type OnBeforeDragStartResponder = (start: DragStart) => mixed;
type OnDragStartResponder = (
  start: DragStart,
  provided: ResponderProvided,
) => mixed;
type OnDragUpdateResponder = (
  update: DragUpdate,
  provided: ResponderProvided,
) => mixed;
type OnDragEndResponder = (
  result: DropResult,
  provided: ResponderProvided,
) => mixed;

type BeforeCapture = {
  draggableId: DraggableId,
  mode: MovementMode,
};

type DraggableRubric = {
  draggableId: DraggableId,
  type: TypeId,
  source: DraggableLocation,
};

type DragStart = {
  ...DraggableRubric,
  mode: MovementMode,
};

type DragUpdate = {
  ...DragStart,
  // populated if in a reorder position
  destination: ?DraggableLocation,
  // populated if combining with another draggable
  combine: ?Combine,
};

// details about the draggable that is being combined with
type Combine = {
  draggableId: DraggableId,
  droppableId: DroppableId,
};

type DropResult = {
  ...DragUpdate,
  reason: DropReason,
};

```

```

type DropReason = 'DROP' | 'CANCEL';

type DraggableLocation = {
  droppableId: DroppableId,
  // the position of the droppable within a droppable
  index: number,
};

// There are two modes that a drag can be in
// FLUID: everything is done in response to highly granular input (eg mouse)
// SNAP: items snap between positions (eg keyboard);
type MovementMode = 'FLUID' | 'SNAP';

```

Sensors

```

type Sensor = (api: SensorAPI) => void;
type SensorAPI = {
  tryGetLock: TryGetLock,
  canGetLock: (id: DraggableId) => boolean,
  isLockClaimed: () => boolean,
  tryReleaseLock: () => void,
  findClosestDraggableId: (event: Event) => ?DraggableId,
  findOptionsForDraggable: (id: DraggableId) => ?DraggableOptions,
};
type TryGetLock = (
  draggableId: DraggableId,
  forceStop?: () => void,
  options?: TryGetLockOptions,
) => ?PreDragActions;
type TryGetLockOptions = {
  sourceEvent?: Event,
};

```

Droppable

```

type DroppableProvided = {
  innerRef: (?HTMLElement) => void,
  placeholder: ?ReactElement,
  droppableProps: DroppableProps,
};
type DroppableProps = {
  // used for shared global styles
  'data-rbd-droppable-context-id': ContextId,
  // Used to lookup. Currently not used for drag and drop lifecycle
  'data-rbd-droppable-id': DroppableId,
};
type DroppableStateSnapshot = {
  isDraggingOver: boolean,

```

```

    draggingOverWith: ?DraggableId,
    draggingFromThisWith: ?DraggableId,
    isUsingPlaceholder: boolean,
  |};

```

Draggable

```

type DraggableProvided = { |
  innerRef: (?HTMLElement) => void,
  draggableProps: DraggableProps,
  dragHandleProps: ?DragHandleProps,
  |};

type DraggableStateSnapshot = { |
  isDragging: boolean,
  isDropAnimating: boolean,
  dropAnimation: ?DropAnimation,
  draggingOver: ?DroppableId,
  combineWith: ?DraggableId,
  combineTargetFor: ?DraggableId,
  mode: ?MovementMode,
  |};

type DraggableProps = { |
  style: ?DraggableStyle,
  'data-rbd-draggable-context-id': string,
  'data-rbd-draggable-id': string,
  onTransitionEnd: ?(event: TransitionEvent) => void,
  |};
type DraggableChildrenFn = (
  DraggableProvided,
  DraggableStateSnapshot,
  DraggableRubric,
) => Node | null;
|};

type DraggableStyle = DraggingStyle | NotDraggingStyle;
type DraggingStyle = { |
  position: 'fixed',
  top: number,
  left: number,
  boxSizing: 'border-box',
  width: number,
  height: number,
  transition: string,
  transform: ?string,
  zIndex: number,
  opacity: ?number,
  pointerEvents: 'none',
  |};
type NotDraggingStyle = { |
  transition: ?string,

```

```

    transition: null | 'none',
  |});

type DragHandleProps = {
  onFocus: () => void,
  onBlur: () => void,
  onMouseDown: (event: MouseEvent) => void,
  onKeyDown: (event: KeyboardEvent) => void,
  onTouchStart: (event: TouchEvent) => void,
  tabIndex: number,
  'data-rbd-drag-handle-draggable-id': string,
  'data-rbd-drag-handle-context-id': string,
  role: string,
  'aria-describedby': string,
  draggable: boolean,
  onDragStart: (event: DragEvent) => void,
|});

type DropAnimation = {
  duration: number,
  curve: string,
  moveTo: Position,
  opacity: ?number,
  scale: ?number,
|});

```

Using the flow types

The types are exported as part of the module so using them is as simple as:

```
import type { DroppableProvided } from 'react-beautiful-dnd';
```

Typescript

If you are using [TypeScript](#) you can use the community maintained [DefinitelyTyped type definitions](#). [Installation instructions](#).

Here is an [example written in typescript](#).

Sample application with flow types

We have created a [sample application](#) which exercises the flowtypes. It is a super simple React project based on [react-create-app](#). You can use this as a reference to see how to set things up correctly.

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