The `quiver` package provides compatibility with the `quiver` commutative diagram editor.

1 Usage

The `quiver` package is intended to be used in conjunction with the https://q.uiver.app/ commutative diagram editor. It functions as a wrapper around the `tikz-cd` package that provides some extra TikZ styles, which are used in diagrams exported by the editor. However, these styles may be used in isolation of the editor.

To use the `quiver` package, add the following to the preamble of your document.

```latex
\usepackage{quiver}
```

2 TikZ styles

The `quiver` package provides several styles that are useful in the rendering of commutative diagrams.

2.1 The `curve` style

The typical method of curving arrows in `tikz-cd` commutative diagrams is to use the TikZ `bend left` and `bend right` styles, together with the `in` and `out` parameters. These styles facilitate the bending of paths with respect to an angle. However, it is often more convenient to bend a path with respect to a distance (namely, the height of the apex of the curve). This may be achieved with the `curve` style\(^1\).

```latex
\begin{tikzcd}
a \ar["f", rr, \text{curve}={height=-24pt}] & b
\end{tikzcd}
```

The `curve` style takes two (optional) named parameters.

\(^1\)The `curve` style is due to AndréC (https://tex.stackexchange.com/users/138900/andr%C3%A9c).
• **height** specifies the height of the apex of the curve. It is a signed distance (default 0).

• **pos** specifies the position of the control point for the curve. It is a value between 0.0 and 1.0 (default 0.35).

```latex
\begin{tikzcd}
a \ar[r, "f", rr, curve={height=-24pt, pos=0.2}] & b
\end{tikzcd}
```

```latex
\begin{tikzcd}
a \ar[r, "f", rr, curve={height=-24pt, pos=0.5}] & b
\end{tikzcd}
```

```latex
\begin{tikzcd}
a \ar[r, "f", rr, curve={height=-24pt, pos=0.8}] & b
\end{tikzcd}
```

### 2.2 Arrowhead and tail styles

The *tikz-cd* package provides several arrowhead and tail styles. The *quiver* package provides the following additional styles.

<table>
<thead>
<tr>
<th>Style</th>
<th>Appearance</th>
</tr>
</thead>
<tbody>
<tr>
<td>tail reversed</td>
<td>←→</td>
</tr>
<tr>
<td>2tail</td>
<td>→→</td>
</tr>
<tr>
<td>2tail reversed</td>
<td>←→</td>
</tr>
<tr>
<td>no body</td>
<td>→</td>
</tr>
</tbody>
</table>

### 3 Version history

The *quiver* version number is tied to the editor version number. This is reflected in the history below: not every editor update corresponds to a package update.
<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Release notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0.0</td>
<td>2020-11-10</td>
<td>First public version. Imports necessary packages and defines the <em>curve</em> style.</td>
</tr>
<tr>
<td>1.0.1</td>
<td>2020-11-27</td>
<td>Added the <em>tail reversed</em>, <em>2tail</em>, and <em>2tail reversed</em> styles.</td>
</tr>
<tr>
<td>1.1.0</td>
<td>2020-12-18</td>
<td>Added a dependency.</td>
</tr>
<tr>
<td>1.2.0</td>
<td>2021-01-11</td>
<td>Added the <em>no body</em> style.</td>
</tr>
</tbody>
</table>