HaskellVerb LaTeX Package

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Abstract

This LaTeX2e package loads the `fancyvrb` package and sets up the `code` environment required by a Haskell compiler as a verbatim environment.

1 Use

Put

```
\usepackage{HaskellVerb}
```

in your document's preamble. Then use the following environments:

1.1 code environment

This

```
\begin{code}
inc :: Int -> Int
inc = (+ 1)
\end{code}
```

typesets like this

```
inc :: Int -> Int
inc = (+ 1)
```

and is recognised by the Haskell compiler as formal code.

1.2 haddock environment

(Don't confuse this with the `haddock` *à la* `javadoc` tool.) This environment has a name that's not quite "cod", just like `code`, but will be ignored by the Haskell compiler. This

```
\begin{haddock}
inc :: Int -> Int
inc = + 1
\end{haddock}
```

typesets like this

```
inc :: Int -> Int
inc = + 1
```

I use this for dead or temporarily commented out code.

1.3 ebnf environment

I use the `ebnf` environment to set grammars in a blue box to distinguish it from Haskell. This

```
\begin{ebnf}
inc :: Int -> Int
inc = + 1
\end{ebnf}
```

typesets like this

```
inc :: Int -> Int
inc = + 1
```

1.4 Input commands

Use these input commands to include code from files and display it in the above styles.

```
\HaskellInput{file}
\HaddockInput{file}
\EBNFInput{file}
```

2 Implementation

2.1 Identification part

```
\NeedsTeXFormat{LaTeX2e}[2001/06/01]
\ProvidesPackage{HaskellVerb}[2020/09/18 Andrew Rock]
```

2.2 Package loading

```
\RequirePackage{fancyvrb}
\RequirePackage{color}
```

2.3 Main code

```
\DefineVerbatimEnvironment{code}{Verbatim}{}
\DefineVerbatimEnvironment{haddock}{Verbatim}{frame=leftline, rulecolor=\color{red}}
\DefineVerbatimEnvironment{ebnf}{Verbatim}%
   {frame=single, rulecolor=\color{cyan}}
\newcommand{\HaskellInput}[1]{\VerbatimInput{#1}}
\newcommand{\HaddockInput}[1]{\VerbatimInput[frame=leftline, rulecolor=\color{red}]{#1}}
\newcommand{\EBNFInput}[1]{\VerbatimInput[frame=single, rulecolor=\color{cyan}]{#1}}
```