

```
1 // @ts-nocheck
2
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4
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24
25 // @filename: renderer.ts
26 // source: https://github.com/shikijs/shiki/blob/ca5a6c60a255fb390776ada849e0
1e1744a916fc/packages/shiki/src/renderer.ts
27 import { FontStyle } from './stackElementMetadata'
28 import { IThemedToken } from './themedTokenizer'
29
30 export interface HtmlRendererOptions {
31   langId?: string
32   fg?: string
33   bg?: string
34 }
35
36 export function renderToHtml(
37   lines: IThemedToken[][],
38   options: HtmlRendererOptions = {}
39 ) {
40   const bg = options.bg || '#fff'
41
42   let html = ''
43
44   html += `

```
${options.langId}</div>`
47 }
48 html += `>`
49
50 lines.forEach((l: IThemedToken[]) => {
51 html += `
```


```

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63     }
64     html += `

```

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131 options: HighlighterOptions
132 ): Promise<Highlighter> {
133   const { _languages, _themes } = resolveOptions(options)
134   const _resolver = new Resolver(getOnigasm(), 'onigasm')
135   const _registry = new Registry(_resolver)
136
137   if (options.paths?.themes) {
138     _registry.themesPath = options.paths.themes
139   }
140
141   if (options.paths?.languages) {
142     _resolver.languagesPath = options.paths.languages
143   }
144
145   const themes = await _registry.loadThemes(_themes)
146   const _defaultTheme = themes[0]
147   let _currentTheme: IShikiTheme | undefined
148   await _registry.loadLanguages(_languages)
149
150   /**
151    * Shiki was designed for VS Code, so CSS variables are not currently supported.
152    * See: https://github.com/shikijs/shiki/pull/212#issuecomment-906924986
153    *
154    * Instead, we work around this by using valid hex color codes as lookups in a
155    * final "repair" step which translates those codes to the correct CSS variables.
156    */
157   const COLOR_REPLACEMENTS: Record<string, string> = {
158     '#000001': 'var(--shiki-color-text)',
159     '#000002': 'var(--shiki-color-background)',
160     '#000004': 'var(--shiki-token-constant)',
161     '#000005': 'var(--shiki-token-string)',
162     '#000006': 'var(--shiki-token-comment)',
163     '#000007': 'var(--shiki-token-keyword)',
164     '#000008': 'var(--shiki-token-parameter)',
165     '#000009': 'var(--shiki-token-function)',
166     '#000010': 'var(--shiki-token-string-expression)',
167     '#000011': 'var(--shiki-token-punctuation)',
168     '#000012': 'var(--shiki-token-link)',
169   }
170
171   function fixCssVariablesTheme(theme: IShikiTheme, colorMap: string[]) {
172     theme.bg = COLOR_REPLACEMENTS[theme.bg] || theme.bg
173     theme.fg = COLOR_REPLACEMENTS[theme.fg] || theme.fg
174     colorMap.forEach((val, i) => {
175       colorMap[i] = COLOR_REPLACEMENTS[val] || val
176     })
177   }
178
179   function getTheme(theme?: IThemeRegistration) {
180     const _theme = theme ? _registry.getTheme(theme) : _defaultTheme
181     if (!_theme) {
182       throw Error(`No theme registration for ${theme}`)
183     }
184     if (!_currentTheme || _currentTheme.name !== _theme.name) {
185       _registry.setTheme(_theme)
186       _currentTheme = _theme
187     }
188     const _colorMap = _registry.getColorMap()
189     if (_theme.name === 'css-variables') {
190       fixCssVariablesTheme(_theme, _colorMap)
191     }
192     return { _theme, _colorMap }
193   }
194
195   function getGrammar(lang: string) {
196     const _grammar = _registry.getGrammar(lang)
197     if (!_grammar) {

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198     throw Error(`No language registration for ${lang}`)
199   }
200   return { _grammar }
201 }
202
203 function codeToThemedTokens(
204   code: string,
205   lang = 'text',
206   theme?: StringLiteralUnion<Theme>,
207   options = { includeExplanation: true }
208 ) {
209   if (isPlaintext(lang)) {
210     return [{ content: code }]
211   }
212   const { _grammar } = getGrammar(lang)
213   const { _theme, _colorMap } = getTheme(theme)
214   return tokenizeWithTheme(_theme, _colorMap, code, _grammar, options)
215 }
216
217 function codeToHtml(
218   code: string,
219   lang = 'text',
220   theme?: StringLiteralUnion<Theme>
221 ) {
222   const tokens = codeToThemedTokens(code, lang, theme, {
223     includeExplanation: false,
224   })
225   const { _theme } = getTheme(theme)
226   return renderToHtml(tokens, {
227     fg: _theme.fg,
228     bg: _theme.bg,
229   })
230 }
231
232 async function loadTheme(theme: IShikiTheme | Theme) {
233   await _registry.loadTheme(theme)
234 }
235
236 async function loadLanguage(lang: ILanguageRegistration | Lang) {
237   const _lang = resolveLang(lang)
238   _resolver.addLanguage(_lang)
239   await _registry.loadLanguage(_lang)
240 }
241
242 function getLoadedThemes() {
243   return _registry.getLoadedThemes()
244 }
245
246 function getLoadedLanguages() {
247   return _registry.getLoadedLanguages()
248 }
249
250 function getBackgroundColor(theme?: StringLiteralUnion<Theme>) {
251   const { _theme } = getTheme(theme)
252   return _theme.bg
253 }
254
255 function getForegroundColor(theme?: StringLiteralUnion<Theme>) {
256   const { _theme } = getTheme(theme)
257   return _theme.fg
258 }
259
260 return {
261   codeToThemedTokens,
262   codeToHtml,
263   getTheme: (theme: IThemeRegistration) => {
264     return getTheme(theme)._theme
265   },
266   loadTheme,
267   loadLanguage,

```

[illegible]