This is a guide about how we used handlebars in our Sacramento State CSC 131 Fall 2023 Programming assignment to Dynamically generate PDFs for E-Commerce Documents.

With handlebars, you can use a LaTeX template with placeholders, and efficiently replace those placeholders with a corresponding value. Let’s say I have in my firestore document a key value pair of Email and [testemail@gmail.com](mailto:testemail@gmail.com). In my template I can use double curly brackets around Email like {{Email}}. Handlebars goes through the template and replaces {{Email}} with [testemail@gmail.com](mailto:testemail@gmail.com), replacing the key with the corresponding value. If your key is two or more words like Phone Number, you have to use {{this.[Phone Number]}} instead, as handlebars does not like the space in {{Phone Number}}.

You can use an else statement as well with this:

{{#if this.[Customer Phone]}}{{this.[Customer Phone]}}{{else}}Not Available{{/if}} This will replace Customer Phone with the value it is paired with if it is found, if not it will print Not Available, or anything else you replace it with.

Lastly, you can also do lists of items.  
{{#each lineItems}}

{{this.[Description]}} & {{this.Quantity}} & {{this.[Unit Price]}} & {{this.Tax}} & {{this.[Amount USD]}}\\

{{/each}}

This goes though the array of table objects lineItems, and looping for each item it prints the description, quantity, unit price, tax, and amount USD.

Need to install handlebars, use: npm install handlebars

Here are the four lines needed in node.js to use handlebars.

const Handlebars = require('handlebars'); //imports handlebars library into node.js script.

const templateSource = fs.readFileSync('handlebarExample.tex', 'utf8'); // reads the template with handlebars placeholders and stores it in templateSource.

const latexTemplate = Handlebars.compile(templateSource); // compiles the template so that, when executed with specific data, will replace handlebars placeholders in template with firestore document values.

const latexDocument = latexTemplate(data); //template with handlebars placeholders is replaced with values from firestore and is then contained in latexDocument. Next compile this and you have your pdf.

These are all we used for the project, for more information on handlebars visit their website at https://handlebarsjs.com/