**Front End Developer Exam**

**Instructions:**

This exam is designed to test your proficiency in front-end development using Nuxt, ES2020, Vuetify, GraphQL, Pinia, Vue3 Composition API, and TypeScript. You will be given a series of tasks that will require you to demonstrate your knowledge and understanding of these technologies, with a focus on how to use Nuxt effectively.

**References:**

* Nuxt.js: https://nuxtjs.org/
* Vuetify:<https://vuetifyjs.com/>
* ES2020:<https://www.ecma-international.org/ecma-262/11.0/index.html>
* GraphQL:<https://graphql.org/>
* Space-X API:<https://studio.apollographql.com/public/SpaceX-pxxbxen>
* Vue Apollo:<https://apollo.vuejs.org/>
* Pinia:<https://pinia.esm.dev/>
* Vue 3 Composition API:<https://v3.vuejs.org/guide/composition-api-introduction.html>
* TypeScript:<https://www.typescriptlang.org/docs/>

**Task 1:** **Clone and set up the starter project**

* Clone the following repository:<https://github.com/stephenjason89/nuxt-vuetify-graphql-pinia-starter>
* Set up the project and ensure it is running correctly
* Familiarize yourself with the project structure and its components
* Star the repository so we can see and record your github profile

**Task 2: Display Launches using Pages**

The project is pre-configured to connect to the SpaceX GraphQL Api. Create a Nuxt page that displays a list of all SpaceX launches. The page should include the following information for each launch:

* Mission name
* Launch date
* Launch site name
* Rocket name
* Details (if available)

**Task 3: Filter Launches using Composables**

Add a filter to the launch page that allows users to filter launches by year. The filter should update the list of launches displayed on the page in real-time. Use Nuxt composables to handle the filtering.

**Task 4: Sort Launches using Composables**

Add a sorting feature to the launch page that allows users to sort launches by launch date in either ascending or descending order. Use Nuxt composables to handle the sorting.

**Task 5: Display Rocket Details using Pages**

Create a Nuxt page that displays details about a specific rocket. The page should include the following information:

* Rocket name
* Description
* First flight date
* Height
* Diameter
* Mass
* Number of stages

**Task 6: Use Nuxt Layouts and Reusable Components**

Create a Nuxt layout that can be used for all pages in the project. Include a navigation bar and footer that are present on all pages. Additionally, create reusable components as necessary for the project.

**Bonus Tasks**

**Task 1: Global State Management using Pinia**

Use Pinia for global state management to implement the following features:

* Add a "Favorites" button to the launch details page
* When the "Favorites" button is clicked, add the current rocket to a list of favorite rockets stored in global state
* Create a favorites page that displays a list of all favorite rockets

**Task 2:  Use Nuxt Middleware**

Create a Nuxt middleware that redirects users to the launch page if they try to access a page that does not exist.