

Schema visualizer

Objective:

The intent of the challenge is to build a web-based schema visualizer for Entity Relationship (ER) models.

Description:

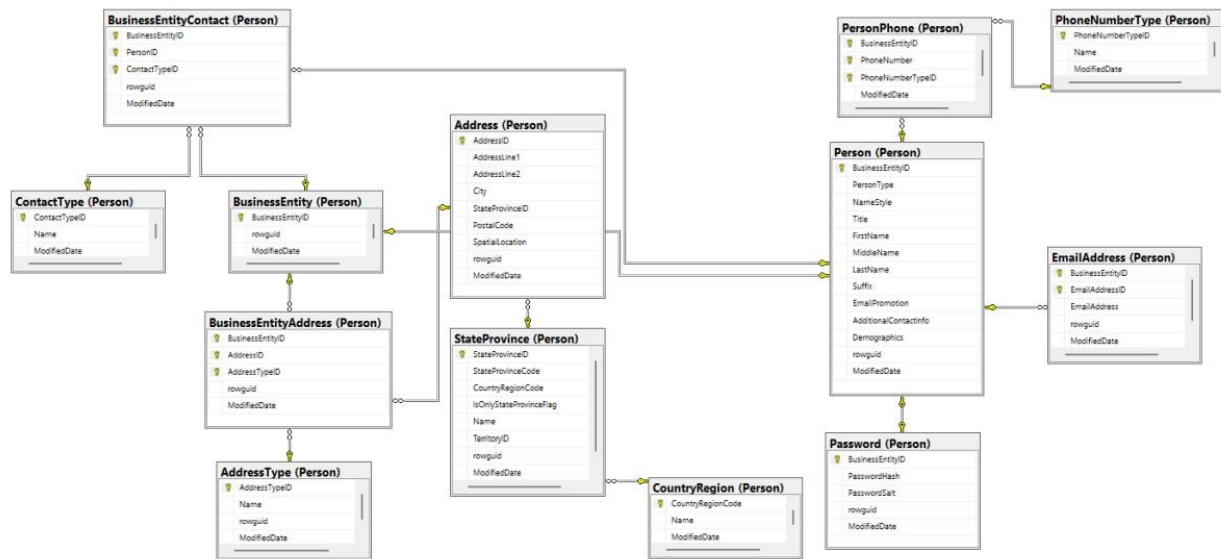
- The user should be able to define entities (e.g., Product, Category, Orders entities)
- Each entity will have set of attributes and user should be able to define them in the along with data type (e.g. Address will have attributes like AddressID (auto generated id), StreetNumber (Integer), StreetName (String), City (String), StateProvinceID (Integer), PostalCode (String), CountyID (Integer))

	Column Name	Data Type	Allow Nulls
🔑	AddressID	int	<input type="checkbox"/>
	StreetNumber	int	<input checked="" type="checkbox"/>
	StreetName	text	<input checked="" type="checkbox"/>
	City	text	<input checked="" type="checkbox"/>
	StateProvinceID	int	<input checked="" type="checkbox"/>
	PostalCode	text	<input checked="" type="checkbox"/>
	CountyID	int	<input checked="" type="checkbox"/>
▶			<input type="checkbox"/>

- Allow user to set the primary and foreign keys in the application
- When the user clicks on the cell, provide an option to mark them as primary or foreign key. For foreign key, the user must also define the foreign entity and its join key

	Column Name	Data Type	Allow Nulls
→ 🔑	AddressID	int	<input type="checkbox"/>
	StreetNumber	int	<input checked="" type="checkbox"/>
	StreetName	text	<input checked="" type="checkbox"/>
	City	text	<input checked="" type="checkbox"/>
	StateProvinceID	int	<input checked="" type="checkbox"/>
	PostalCode	text	<input checked="" type="checkbox"/>
	CountyID	int	<input checked="" type="checkbox"/>
▶			<input type="checkbox"/>

- Application should allow user to link foreign keys to relevant entity e.g., Address.StateProvinceID will reference StateProvince entity using the primary StateProvinceID
- Once user defines all the entities, the final output should look like below screen



Note:

Required technologies

- JavaScript
- Node JS
- HTML 5
- CSS

Browser

- Chrome or IE Edge