

### **Attributes Regarding Person Registration details (Parent Class)**

1. Id (primary key, auto incremented,int)
2. Username (not null, string, validation[characters only, min length(10)])
3. Password (not null, string, validation[characters + at least 1 symbol + at least 1 digit, min length(10)])
4. firstName (not null, string, validation[characters only])
5. lastName (not null, string, validation[characters only])
6. birthdate (not null, date)
7. gender (not null)
8. email (not null, string, validation[email])
9. phone(not null, string, validation[min length(10), max length(10)])
10. Address(not null, string)
11. Role (not null, string)

### **Attributes Regarding User Registration details (Child Class of Person)**

(Inherit All data from parent class)

### **Attributes Regarding Builders Registration details (Child Class of Person)**

(Inherit All data from parent class)

All attributes should be not null

1. years of experience (int, validation[min length(0), max length(20)])
2. Rate per month (decimal, validation[min (0)])
3. Construction type(ENUM)=>[WAREHOUSE,HOUSE,APARTMENT,MALL] (checkbox)(string)
4. Emergency contact number(not null, string, validation[min length(10), max length(10)])
5. Availability (Status) => ENUM (string)[YES,NO]

### **Required Attributes for Admin Registration details (Child Class of Person)**

(Inherit All data from parent class)

1. last\_login: Timestamp of last login (dateTime)
2. last\_password\_change: Timestamp of last password change (dateTime)

### **Required Attributes for Company Details (After login into builder's portfolio)**

1. Builder Id (Association) [Builder **has a** Company](foreign key)
2. company\_id (primary key, autoincremented,int)
3. name (not null, string, validation[characters only])
4. address (not null, string)
5. contact\_details
  - a. phone\_number (not null, string, validation[min length(10), max length(10)])
  - b. email (not null, string, validation[email])
  - c. website(not null, string, validation[url])
6. founding\_date (not null, date)
7. license\_number (not null, int, validation[min length(5),max length(5)])
8. Construction type(ENUM)=>[WAREHOUSE,HOUSE,APARTMENT,MALL] (checkbox)(string)
9. annual\_revenue(not null, decimal)
10. number\_of\_employees (not null,int,validation[min(5)])

### Required Attributes for Project

1. project\_id (Primary key, autoincremented,int)
2. builder\_id [Builder **has a** project](foreign key)
3. user\_id [User **has a** project] (foreign key)
4. project\_detail\_id (bi-directional association) (foreign key)
5. project\_name (not null, string, validation[characters only])
6. pincode (not null, int,validation[min length(6),max length(6)])
7. start\_date (not null, date)
8. end\_date (ENUM) (not null[auto update as per ENUM value of type of construction], date)
9. project\_status (ENUM) => [COMPLETE, PENDING, IN\_PROGRESS] (not null, string)
10. project description(not null, string)
11. Total Price(not null, decimal[Auto generate as per (rate\*area per square feet)])

### Required Attributes for Construction Details

1. Project\_Id (bi-directional association) (foreign key)
2. Project detail id (primary key, autoincremented, int)
3. Area in SqFt (not null, double)
4. Construction type(ENUM) =>[WAREHOUSE,HOUSE,APARTMENT,MALL](not null, string)
5. Builder Name (not null, string(drop down list from builder's table ))
6. Construction Description(not null, string)

### Required Attributes for Builder's Reviews

1. review\_id (primary key, autoincremented, int)
2. user\_id (Association) (foreign key) [builder reviews **has a** user\_id]
3. builder\_id(Association) (foreign key) [builder\_id **has** reviews]
4. rating (not null, int, validation[min(0),max(5)])
5. review (not null, string)
6. review\_date (not null, date)