

# **SpaceX** Database Management System

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## **Conceptual Schema**

24, Nov 2020;

**Batch No - 09**

# Database Conceptual Schema

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1. **Rocket** ( name: **VARCHAR(20)**, type: **VARCHAR(10)**, stages: **INTEGER**, rocket\_id: **VARCHAR(24)**, active: **BOOLEAN**, country: **VARCHAR(40)**, company : **VARCHAR(20)**, cost\_per\_launch: **INTEGER** );
2. **Payloads** ( payload\_id: **VARCHAR(24)**, name: **VARCHAR(35)**, type: **VARCHAR(20)**, reuse: **BOOLEAN**, manufacturer: **VARCHAR(10)**, mass\_kg: **FLOAT**, mass\_lb: **FLOAT**, orbit: **VARCHAR(3)**, reference\_system: **VARCHAR(12)**, regime: **VARCHAR(20)** );
3. **Missions** ( launch\_status: **BOOLEAN**, launch\_id: **VARCHAR(24)**, name: **VARCHAR(25)**, date: **DATETIME**);
4. **Launch Pad** ( launchpad\_id: **VARCHAR(24)**, name: **VARCHAR(20)**, full\_name: **VARCHAR(40)**, status: **VARCHAR(20)**, locality: **VARCHAR(30)**, region: **VARCHAR(20)**, timezone: **VARCHAR(30)**, latitude: **FLOAT**, longitude: **FLOAT** );
5. **Drone Ship** ( ship\_id: **VARCHAR(24)**, home\_port: **VARCHAR(30)**, name: **VARCHAR(35)**, type: **VARCHAR(20)**, roles: **VARCHAR(45)**, activity: **BOOLEAN**, mass\_kg: **FLOAT**, mass\_lb: **FLOAT** );
6. **Administrators** ( name: **VARCHAR(25)**, admin\_id: **VARCHAR(12)**, password: **VARCHAR(20)** check ( LENGTH(password) > 8 ), access\_level: **VARCHAR(10)** );

## Conceptual Schema for Relations:

1. **Delivers** ( payload\_id: **VARCHAR(24)**, rocket\_id: **VARCHAR(24)** );
2. **Assigned** ( rocket\_id: **VARCHAR(24)**, payload\_id: **VARCHAR(24)**, launchpad\_id: **VARCHAR(24)** );
3. **First\_stage\_recovery** ( rocket\_id: **VARCHAR(24)**, ship\_id: **VARCHAR(24)**);
4. **Updates\_Data** ( launchpad\_id: **VARCHAR(24)**, payload\_id: **VARCHAR(24)**, rocket\_id: **VARCHAR(24)**, ship\_id: **VARCHAR(24)** );

