

# Military Database

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The motivation and goal are to keep track of personnel, equipment, vehicles, and missions across multiple bases. Recording the dates in some entities will ensure we preserve useful historical data.

- Soldier has 1 or N Specialties. Specialty can belong to 0 or N members.
- Soldier has 1 Rank. Rank can belong to 0 or N members.
- Soldier has 0 or 1 supervisor (recursive relationship with another member).
- Soldier (must be sergeant or higher rank) can manage 0 or N Missions. Each Mission is managed by 1 Soldier (must be sergeant or higher rank).
- Mission is located in 1 Location. Location can have 0 or N Missions.
- Base IS-A Barracks or Storage.
- Soldier belongs to 0 or 1 Base (Barracks). Base (Barracks) has 0 or N Soldiers.
- Base is located in 1 Location. Location can have 0 or N Bases.
- Soldier can participate in only 1 Mission at a time but can be in multiple when they end, Mission can have 1 or N Soldiers.
- Vehicle is assigned to 0 or 1 Base (Storage). Base (Storage) can have 0 or N Vehicles.
- Equipment originates from 0 or 1 Base (Storage). Base (Storage) can have multiple Equipment.
- Soldier owns 0 or N Equipment, Equipment is owned by 0 or 1 Soldier.
- Soldier drives 0 or 1 Vehicle, Vehicle is driven by 0 or 1 Soldier.
- Mission Participation (Soldier +Mission) can be awarded 0 or 1 Medals. Mission Participation can have 0 or 1 Medals.
- Vehicle is one Vehicle Type. Vehicle Type can have 0 or N Vehicles.
- Equipment is one Equipment Type. Equipment Type can have 0 or N Equipments.
- Medal is one Medal Type. Medal Type can have 0 or N Medals.

*Entities:*

<i>Soldier</i>	
<i>id</i>	<i>The unique id of member.</i>
<i>first_name</i>	<i>Person's first name.</i>
<i>last_name</i>	<i>Person's last name.</i>
<i>date_of_joining</i>	<i>The date when the Soldier started his service.</i>

<i>Rank</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>name</i>	<i>Rank's name (e.g., soldier, sergeant, captain).</i>
<i>description</i>	<i>Rank's description (optional).</i>

<i>Specialty</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>name</i>	<i>Specialty's name (e.g., pilot, tank operator, medic, mechanic, ...).</i>
<i>description</i>	<i>Specialty's description (optional).</i>

<i>Base</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>name</i>	<i>Base's name.</i>
<i>type</i>	<i>Barracks or Storage.</i>

<i>Location</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>country</i>	<i>The country of the location.</i>
<i>city</i>	<i>The city of the location.</i>

<i>Equipment</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>status</i>	<i>Status (functional, broken)</i>

<i>Equipment Type</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>type</i>	<i>Type (e.g., weapon, communication device, uniform, etc.).</i>

<i>Vehicle</i>	
<i>id</i>	<i>The unique identifier.</i>

<i>Vehicle Type</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>model_name</i>	<i>Model of vehicle.</i>
<i>name</i>	<i>Vehicle Type name (e.g., aircraft, tank, helicopter, transporter, etc.).</i>

<i>Mission</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>name</i>	<i>Mission name.</i>
<i>description</i>	<i>Mission's description.</i>
<i>start_date</i>	<i>Date and time when mission begins.</i>
<i>end_date</i>	<i>The date when it has completed. Might be null depending on status.</i>
<i>status</i>	<i>status (planned, active, completed, cancelled)</i>

<i>Medal</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>award_date</i>	<i>The date when award has been received.</i>
<i>description</i>	<i>Why the medal was awarded.</i>

<i>Medal Type</i>	
<i>id</i>	<i>The unique identifier.</i>
<i>name</i>	<i>The name of the medal.</i>