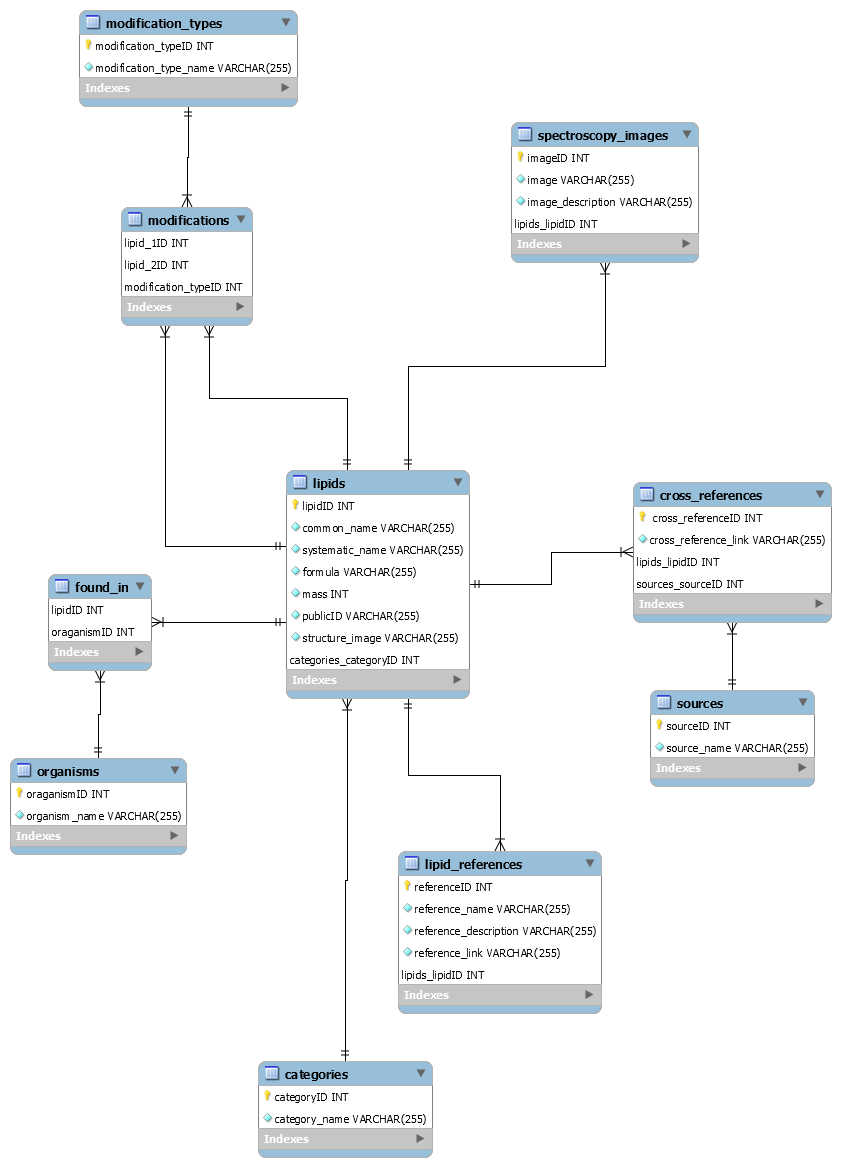
****

**Relational Schema**

lipids(lipidID INT, common\_name VARCHAR(255), systematic\_name VARCHAR(255), formula VARCHAR(255), mass INT, publicID VARCHAR(255), structure\_image VARCHAR(255), categories\_categoryID INT )

organisms(organismID INT, organism\_name VARCHAR(255))

categories(categoryID INT, category\_name VARCHAR(255))

lipid\_references(referenceID INT, reference\_name VARCHAR(255), reference \_description VARCHAR(255), reference\_link VARCHAR(255), lipids\_lipidID INT)

cross\_references(cross\_referenceID INT, cross\_reference\_ link VARCHAR(255), lipids\_lipidID INT, sources\_sourceID INT)

sources(sourceID INT, source\_name VARCHAR(255))

spectroscopy\_images(imageID INT, image VARCHAR(255), image\_description VARCHAR(255), lipids\_lipidID INT)

modifications\_lipids(lipids\_1ID INT, lipids\_2ID INT, modification\_typeID INT)

modifications(modification\_typeID INT, modification\_type\_name VARCHAR(255))

found\_in(lipidID INT, organismID INT)

lipids

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| lipidID | common\_name | systematic\_name | formula | mass | publicID | structure\_image | categories\_categoryID |

organisms

|  |  |
| --- | --- |
| organismID | organism\_name |

categories

|  |  |
| --- | --- |
| categoryID | category\_name |

lipid\_references

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| referenceID | reference\_name | reference \_description | reference\_link | lipids\_lipidID |

cross\_references

|  |  |  |  |
| --- | --- | --- | --- |
| cross\_referenceID | cross\_reference\_ link | lipids\_lipidID | sources\_sourceID |

sources

|  |  |
| --- | --- |
| sourceID | source\_name |

spectroscopy\_images

|  |  |  |  |
| --- | --- | --- | --- |
| imageID | image | image\_description | lipids\_lipidID |

modifications\_lipids

|  |  |  |
| --- | --- | --- |
| lipids\_1ID | lipids\_2ID | modification\_typeID |

modifications

|  |  |
| --- | --- |
| modification\_typeID | modification\_type\_name |

found\_in

|  |  |
| --- | --- |
| lipidID | organismID |

**Functional Dependencies**

lipidID → common\_name, systematic\_name, formula, mass, publicID, structure\_image, categories\_categoryID

organisms → organismID, organism\_name

categories → categoryID, category\_name

lipid\_references → referenceID, reference\_name, reference \_description, reference\_link, lipids\_lipidID

cross\_references → cross\_referenceID, cross\_reference\_ link, lipids\_lipidID, sources\_sourceID

sources → sourceID, source\_name

spectroscopy\_images → imageID, image, image\_description, lipids\_lipidID

modifications\_lipids → lipids\_1ID, lipids\_2ID, modification\_typeID

modifications → modification\_typeID, modification\_type\_name

found\_in → lipidID, organismID