Class Diagram Link:

https://www.draw.io/?lightbox=1&target=blank&highlight=0000ff&edit=\_blank&layers=1&nav=1&title=Untitled%20Diagram.drawio#R7V1bb9u4Ev41AXoO4EBXW35skt62u9u02c02T4Zi07YQWfRKchP34fz2w6tEiZStNDaZpiyKWLyIpjnfDGeGQ%2FLEP189vMvj9fIPOAPpiefMHk78ixPP84ORgz5wzpbmeK7HchZ5MqN5bp1xlXwHLJNX2yQzUDQqlhCmZbJuZk5hloFp2ciL8xzeN6vNYdr81nW8AFLG1TRO5dx%2Fklm5ZLmu49QF70GyWLKvjkJWcBtP7xY53GTs%2B048f07%2B0eJVzNti9YtlPIP3Qpb%2F5sQ%2FzyEs6dPq4RykeHD5sNH33naUVv3OQVb2eWEUjYeuG47nzhCMIxANfNaxb3G6YYPxLl4B1ttyy0eouE9WaZyh1NmyXKUo00WPc5iVV6wSTsdpssjQ8xR1B%2BQo4xvIywSN82tWUMI1yp0uk3T2e7yFG9zpokSDyFNnS5gn31GzMf8OVJyXDDLesFHjCr%2BJsh2Um4MC1bnkI%2BFWWb%2FHRcnqTGGaxusiua06vIrzRZKdwbKEK1aJ%2F9K3SZqewxTmZAA4WVGrmNpgxmtzgtL2V8mUPafxLUjPKnjwljJIxrAoc3hXYY0MpfB1rBIe3bfxKkkxW12DfBZnMR90Oh6uJwOAYQKPPHgQshgg3gG4AmW%2BRVVYacAxwLiXJ%2B9rTvA4hy8FJvCHLDNm3Leomq4RiB4YCPsC0pUAOcCcBDcFSr5Gj3%2BQxzZA0Y8tm%2BCkY9weU3mYOWhTMC87IVus42mSLX4ndS6COucLGxCcdb9MSnCF8nGf7pGsRHkQtTdPCUSWyWwGMgKhMi5jikKMlTVMspIMYniG%2FqNhPXdOw5MQ%2Fa5zlHbrNPqPq%2BflOczQ74sTQnWAIH4PMMzPZDx0s%2Fx%2BhHB5PuyHCF7vsIDwlIAosviOAeKKPFpA6ANE6JkEhK8EBJbKOZ%2BLMSz%2BFjIsOPSBYxTpA8fg4%2FVv80%2Fl1ef7zx8%2BbK6%2FLS9vvg%2FUM8g6jbdYJ8HQuKTPFhU7UCERvBdQOlHhOoFhWKjnkXi9TreTfJOC4tV%2FLCJ0IqKvonmcWSSS4CBRP03aBk8vvX0P6VeIYCmoaf0XhsLFwJXw4Mt48BV0JpbGJSySMoG4%2FZzWbdHfyFTghj01x%2BgYFB4rKHyGKQzKyWZtuV0vFIam5b%2BsNlI4YH%2BHBYNe0T82KfoDWROgSFjnAP%2BqCXZSYkQ4r76BaQlzCw6t3gbXpLshkB2iHBxwCopikmTrTfkKD4Xn3IGtxYZWbHDe1YGNr6uHi7%2F9u7ejYnAXh1%2FW1876SmFFUHgkBTIisgzRAUkOYmTeQphacGh1U2r0PCjB0aVizJNsNlnCFEyyzeoW5JO4nKyZxs5EyQMeRNQ8SWwZhEjKIkgfgsZ9ldQDGCxKBAUdCFogmwUgEOVoCBBmGD7QyCDKWIhohIjvaZyBpP5WPhOB2mC2AHwRFqS38P5NnSFiYN%2BKZJyXeM2T0UFcdo1QGoHvNV5pR8lZEq9gNvtrmWS0QHgNpfjaJF6r7bWEid7C3UYJjjcl8ZjdgX%2FuTkLlII3L5BtovKWiAnv1EnIJTNc2%2BNo%2BI%2FjQHTWbKOAmnwL2VouWVTd%2BXAKEkgRwZZLXxIBrwkYCnQUSeJyQatKJNHaDFghIUwK0EKMt4QJmcSria4%2FAuGUr693kRN%2BIZNsuhasv3Rn9uPuf8ytNPREU7TXyiuP3gEJqyGuhyxuOmw3R8ZAaQgSMt0I1Jia7O%2ByoO9zVL6k%2B61cNbtqDg0J9KEFdvbZvg09ebPDJoMVYUU%2FHUMgNwYNrYCMJlINaPd9avfzRStdO1n%2BWMSjKHsvrRSQMZbu6RWY%2BQcV0GecWFnphoTMSRdljeZGJrCqnRNewbiAzqNAZgqLssauWFqCYxmswE4ExTEtKnqyBkOG%2FGxwTjLUGyIJW8sVt%2FAr9CIdORconvGhBxtXBE%2FVgziZw%2FDrS%2B2FBqN2oUpDJHFdw1g9VEcHGgFYnhRkkCKn6hZ4W9DNsB4aHaJxwLolqrlJ83EIycijnAj%2Fjjod4pEI03PvqulVdDpkfasarm6HkqUoGJJPyLsp8TZKUTPwNSqHqDcLHKEU5GWe7JClyM84lzIsLao5uZFOuxlmEr3FWk7NxEeZt0rjA3Tg%2FEHMph9fZApfjTErFUOB0nMt4HefX3I4LHJLHjQ36q8Mz8ocMOeF0lCKjcU7y3XY%2B%2BSPJAdxYJQlwuUAVyud96F4VVSSvhUFItLaKtn6NEWcrtBBGdT6VFzVSRsI7TG7UhcO6LC7q%2FIXQgTYiSbKCpZjZZBZWT%2BIqKiyQRKLygrOgnVx0Ti5aI9nUs0uXlzgpGisLdiHKHEh0BrepQaLWTMlGigneu1UZslYFeW4qCNcTJSUEk4pN9plCH6FDgytMuY5B3%2BeEC2k3yQTj7E3%2Fh2fQ2blB0KppgahyZULaqiohb6OSSOSqGie0%2BHtIalE%2FyyRnYy6QXcip6cApwYeMU47Rg1Kv75tu480aEgdp3Gs2zoEi1BiwIq6x8hEUAFO%2Fz5EivM%2B0V0F%2F5RqsrMMK6mpbj20VcV1W0GZV%2Bmyt0co6LVdfFXqtWNTQbQXttqXfNjTcto7LtdyGnluNUXjGPhgZmV7LNV7GKVzrlcvZh0L7bem%2FFa5renMt%2BHF4a1QRgCbqxUwzFpHkN3HqbFutUi25LueasojXUauNSmMWKw2bdeKiWb5odFPNNSxTYJ52kSwAqneUMoOLVfz8lstWUdxY4%2B9lGn9RUOdb48%2Fq9fv1%2Br47Go4XgCgHqAp6%2Fdbq9Vav35e2er3V661eb%2FV6q9dbvd7q9Vavt3o9QozpQJIqdq51bAVbzJkk2YTuHJ%2FAebVD0YJEawyaYzquxPOUINmsZ3EJ9m0psmjRixbf%2BDqxai9rCwS%2F9hkXh4pN7bvY6xyL0vLkUe8be3hltxMag0bfgPbjCQF5yqihsbXQMAYN3zHtSna79itjaNDIdo4PG9tuACD86EtzAJE3I9aBZtg5aUPMDMIjNG2N8INaJHgs42LC1josQgwiJDJ9nIEr76arEZKDeLoEs0lMjsZ4ddI6stXZLCx2jGEncE1PPl6XdjJLyHltdnn7%2BSxv4z905VfJ2GGLtUPK3NIyuF2OeZHLMcFYQI5djrGzz%2F7Zxzet23pde2yoXjtBQwGpeLOOdd3g0HmUrBocXXYxwsZqDXJ7PKQ5cOg8WlYNDtkqVt9QYo%2B1ebHH2kTc7c%2BPqegJyvBoK0Se%2Blwbe37JQcWV9wNrh6bFlfqoCnvgkWlkGD%2FaxlPvIF5P7GVshqFh%2FHwbxbWRGBp5tqCw%2BBJnM7j6kxx2%2FA5kII9LaOcW3TAxf1KFrzKUWiiwEUiHIHXv8yaOpWD6XYuBxPixXhL9kOhrdByP%2B7tW%2F%2F5nMWEIEyPT5oby3jXF2UU7bkWwy8Em7FTHtDnSeZ8bXnKcxhvUA2qZWLmiHx2eaYuk896mYg05Loix%2Bt%2FahLU40Y6T0LRFEnRFyk%2BRGAFWgJgCRu84%2BaPdvON1CRBQTmZJDqa1XjKMV3jw6V9UZSbqKVKhXQTUDiff%2BE69oCt6rdrQibTdnLjJrLjRjw%2Fje%2FOCrvgScS9nZQc1BIyVKCYQ03uP39EQ0xV0sgDljd3HZRAakWmnStDlaEPQ%2BGqhYQ4a5qPogy5%2FG4LGld3iZxwgxgNdgy63GgLIlz%2FfcXTYFd1nARfjoa%2BBvMz3ou%2Bn7H3tpHM65qxULcDR5BPvnhzxYzyqO9DDZhN9755sByVKDR3o7slR%2By5J9j3KuyTrt3nzcD4vQHnSBurj7psM7xajm4Hj3c%2FBpffbp38%2FrhfuQHb9NXYltUBsw3NfbHhu%2BzrXsPdS%2BSHCJ5TYlL2POKAKbzAp6AT8DUztjPuIGXenBHiW4bnqHtsznLQQune07bEEQOcRTsIcZT3FumEx0mi%2Fq3vctSyFz%2BjB08Mkg8xJnEELD83wGGu03tU97lpmKmp4KOKqMiiuJ9iDIo2CyPU0GvXqLu%2B4UBDlJTMGJeL94RCy0XjmEKMztFfd5R2LUe%2Bx0cL9htZsMQIQnXG%2BantWVmetnxCVcFrytcOTQ7gIw2HYbHXcaqKvi7DdUMhXFg%2FsImx%2FTzAcP6pfrfpNl%2BKh3IXc0rYQ1gJh%2FzRCIiqMIs8PvbHX%2BI7RcHwaOLQkcN3RD3rAd3%2FJ2AtPo1FUfUtLNB4M%2BsGpGzW%2BOApGp5E7rv%2Ft%2BRGPa%2BBIzCEbHnjel%2FjDetF%2FGS%2F6uPcexPBoXnTZkLGnXBxcHa14%2F%2Bdxoyu2ndlTLp4DMnSecqHusip2zi6wHJ7SfQ%2BtOMAGD7UI6Ap0em9P8TOBB51Rs%2Boud%2FmwCCCsa%2Fw5gMTVGUCr7nPXuRb2ah3T2NAZO6ueUnZ4we3dOkaxoTNQVo2NXXLDXq5jHiE6D4pVI6Rr1449CuVZI8dzNWqun%2F4tinef3r65mbxJrr%2B%2FGX52F%2B8VwaJmFiYwxV76woTrtOLvw1HLe9l39UFqadT2g3YsMfyAz14JG9ll329Xj%2FXhv1gffntPyKhvZEl14ODBhVuHCx8AG%2F76iLlupwB4ln57ZY%2Ft%2BaFa6Kwz%2Bl3Z4y5jyW47fQZSQGcQvLLHO443YGfoTEgZNpWs08UUTHQGw7%2F%2F5y6eTW4e4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