IntelliJ Integration

QDL syntax highlighting can be integrated into your IntelliJ IDE and you can use the full power of your IDE's editor. This is *not* a full blown plugin, but a quick way to get you up to speed.

This is actually not hard to do at all (if you slog through enough documentation to find it!) and is mostly clicking a few boxes and pasting a whole bunch of stuff from below.

1. Setup the file type.

Open Settings (Ctrl + Alt + s) and navigate to

Editor → File Types

Under **Recognized File Types** click **+** (to add a new one).

Set the name and description to be QDL and the following (See the screen shot)
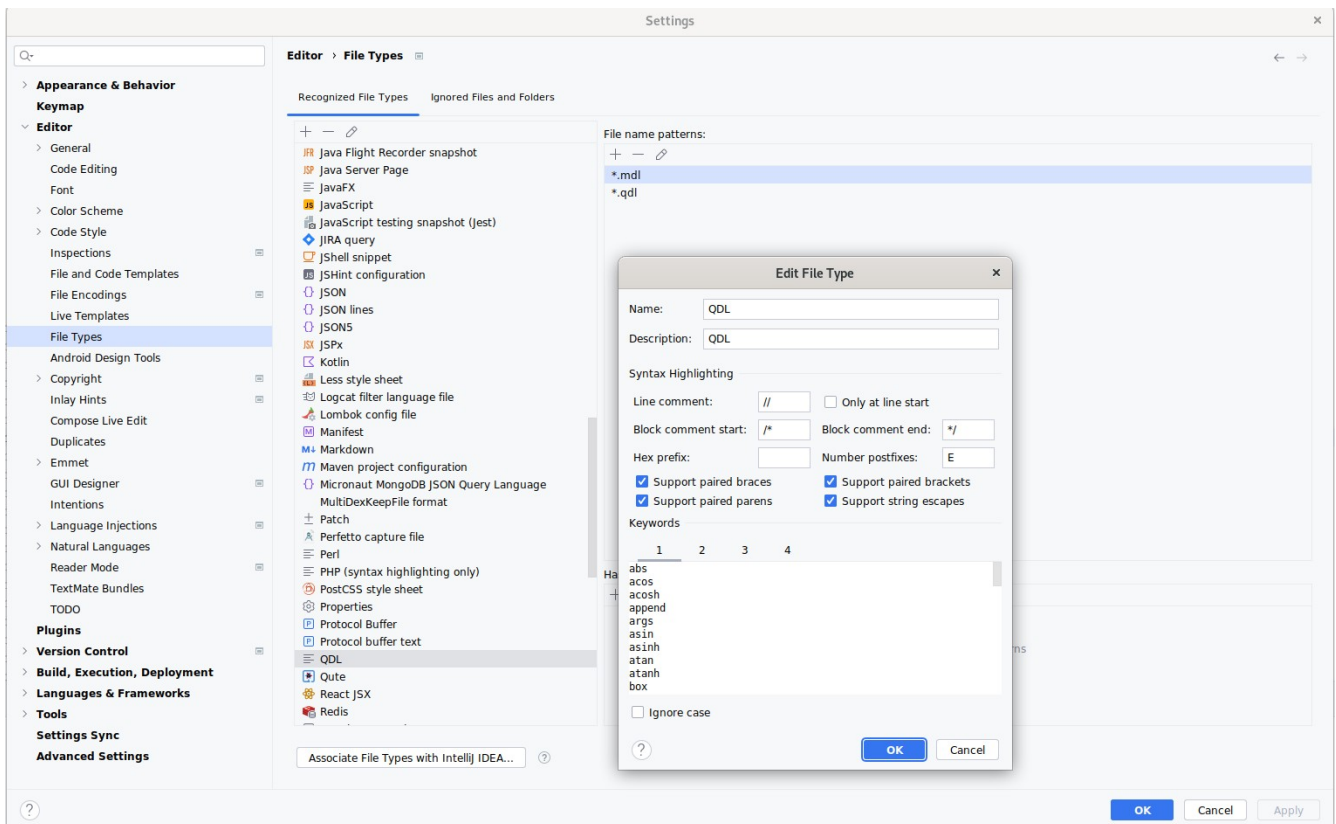
Then click on the File

Line comment: **//**

Block Comment Start: **/***

Block Comment End: ***/**

Number postfixes: **E**

You want to select all of the next set of boxes for pairing brackets and parentheses.

It should look a lot like the next screen shot:

2. Set the syntax highlighting.

Under the boxes you will a box for **keywords** with 4 tabs. Each tab corresponds to a different highlighting color. The following lists goes into the boxes. Remember that each line is a token so line breaks are essential.

Box 1 (functions)

abs
acos
acosh
apply
arg_count
args
asin
asinh
atan
atanh
box
break
cb_exists
cb_read
cb_write
ceiling

check_after
check_syntax
common_keys
constants
contains
continue
cos
cosh
date_iso
date_ms
debugger
decode
detokenize
diff
differ_at
dim
dir
docs
encode
excise
exclude_keys
exp
expand
file_read
file_write
floor
for_each
for_keys
for_lines
for_next
fork
from_json
from_uri
funcs
gcd
halt
has_key
has_keys
has_value
hash
head
identity
import
include_keys
index_of
indices
info
input_form
insert
insert_at

```
interpret
is_defined
is_function
is_list
is_null
j_load
j_use
join
keys
kill
lcm
lib_entries
list_copy
list_keys
ln
load
loaded
log
logger
mask
max
min
mod
module_import
module_load
module_path
module_remove
names
nroot
numeric_digits
os_env
pi
pick
print
query
raise_error
random
random_string
rank
reduce
remap
remove
rename
rename_keys
replace
return
reverse
say
scan
script_args
```

```
script_load
script_name
script_path
script_run
set_default
shuffle
sin
sinh
size
sleep
sort
star
starts_with
sublist
substring
tail
tan
tanh
to_boolean
to_json
to_lower
to_number
to_string
to_upper
to_uri
tokenize
transpose
trim
unbox
union
unique
unload
use
values
var_type
vars
vfs_mount
vfs_unmount
ws_macro
п
```

Box 2. Reserved QDL keywords.

```
assert
block
body
define
do
```

```
else
if
module
switch
then
while
```

Box 3. Operators

```
@
∋
Ɖ
∀
≍
μ
⊙
⊕
∃
∄
∈
∉
<<
⊢
|^
l
⌈
∪
∩
∧
~|
∔
*
×
/
÷
%
Δ
+
+
-
—
&&
∧
||
∨
≡
≠
≤
≥
```

!
¬
≈
∂
[|
⟦
|]
⟧
√
∅
⊨
`

(Note that once you drop these in the box, Intellij will actually sort these, so the order may come back different than you put in. That is fine.)

Box 4. Standard Math operators (ASCII)

~
!
#
%
&
*
+
-
<
=
>
?
@
^
|
~
¬
¿
×
÷
/
\

3. Set the file pattern

Close the syntax box and add two file patterns, one for QDL files and one for modules files:

*.qdl

*.mdl

You should now be able to create a file with the .qdl extension and all the syntax is highlighted, brackets. braces matched etc.