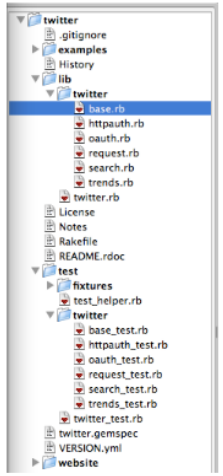
How to Read

See the big picture



I'm going to assume that you at least know at a macro level what the code you're reading accomplishes. If not, I suggest reading the project's website, tutorials, documentation, and anything else you can get your hands on except the code.

Okay, with that cleared I suggest your first step is to wrap your head around the project's structure. This is a variable amount of work depending on the size of the codebase you've chosen, but anything larger than one file will require a little bit of time.

First, note the file structure. This step is aided by an editor that has a folder hierarchy view like TextMate. For example, here is a nice overview of the Twitter Ruby gem.

The goal with this step is to just get familiar with the source. Find out which files include/require/load other files, where the bulk of the code is, the namespaces used if any, and things of this nature. Once you've got the big picture you'll be ready to dig into the details.

Document your findings

Reading code should not be a passive activity. I encourage you to add comments as you go, documenting your assumptions and your conclusions as you begin to understand the program flow. When you first get started your comments will probably look something like:

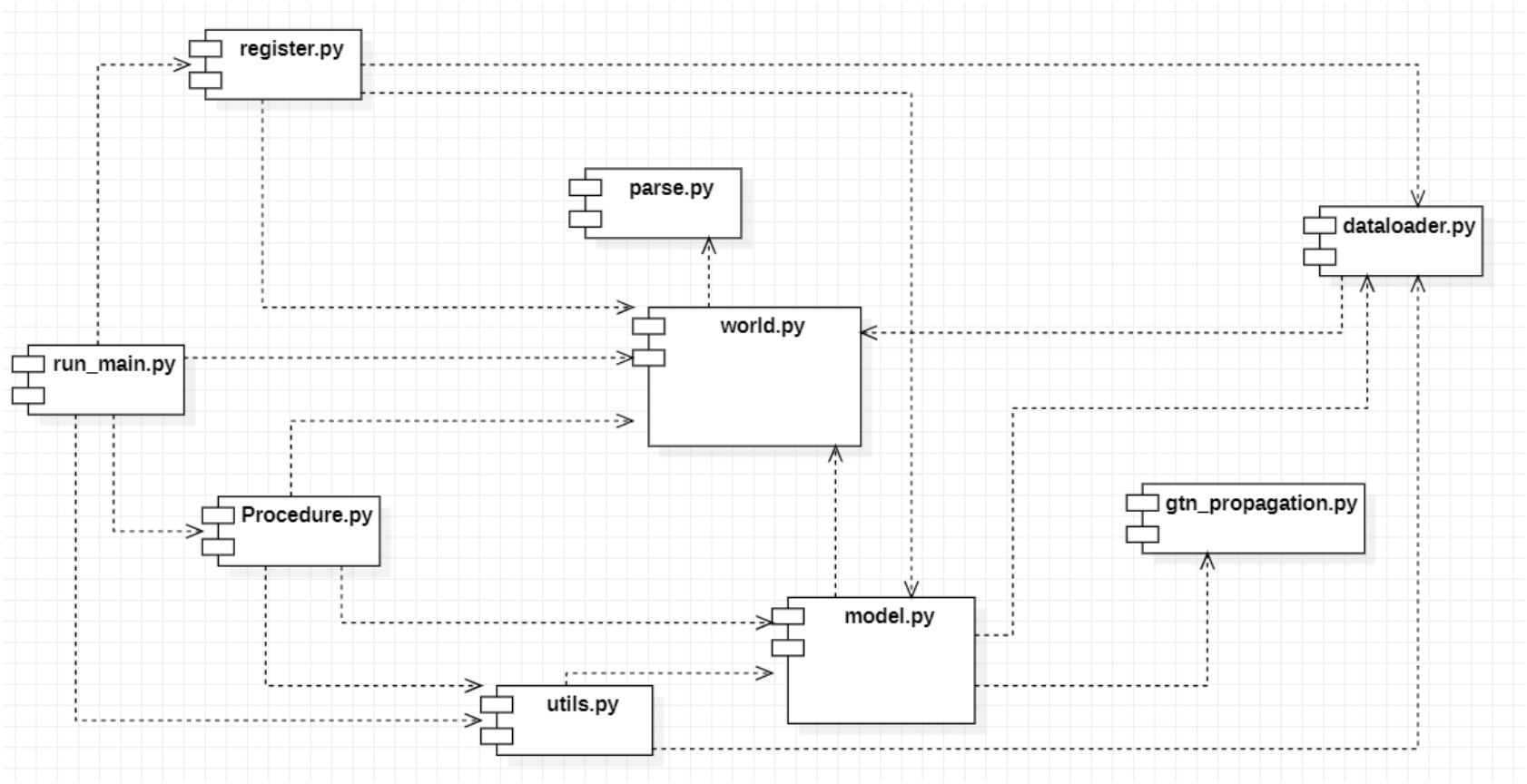
```
# I think this function is called after 'initialize'
# What does this equation even do?
# Pretty sure this variable loses scope after line 17
```

As your understanding progresses you can remove the little breadcrumb comments you left yourself and perhaps write more meaningful and authoritative comments that could possibly be committed back to the project.

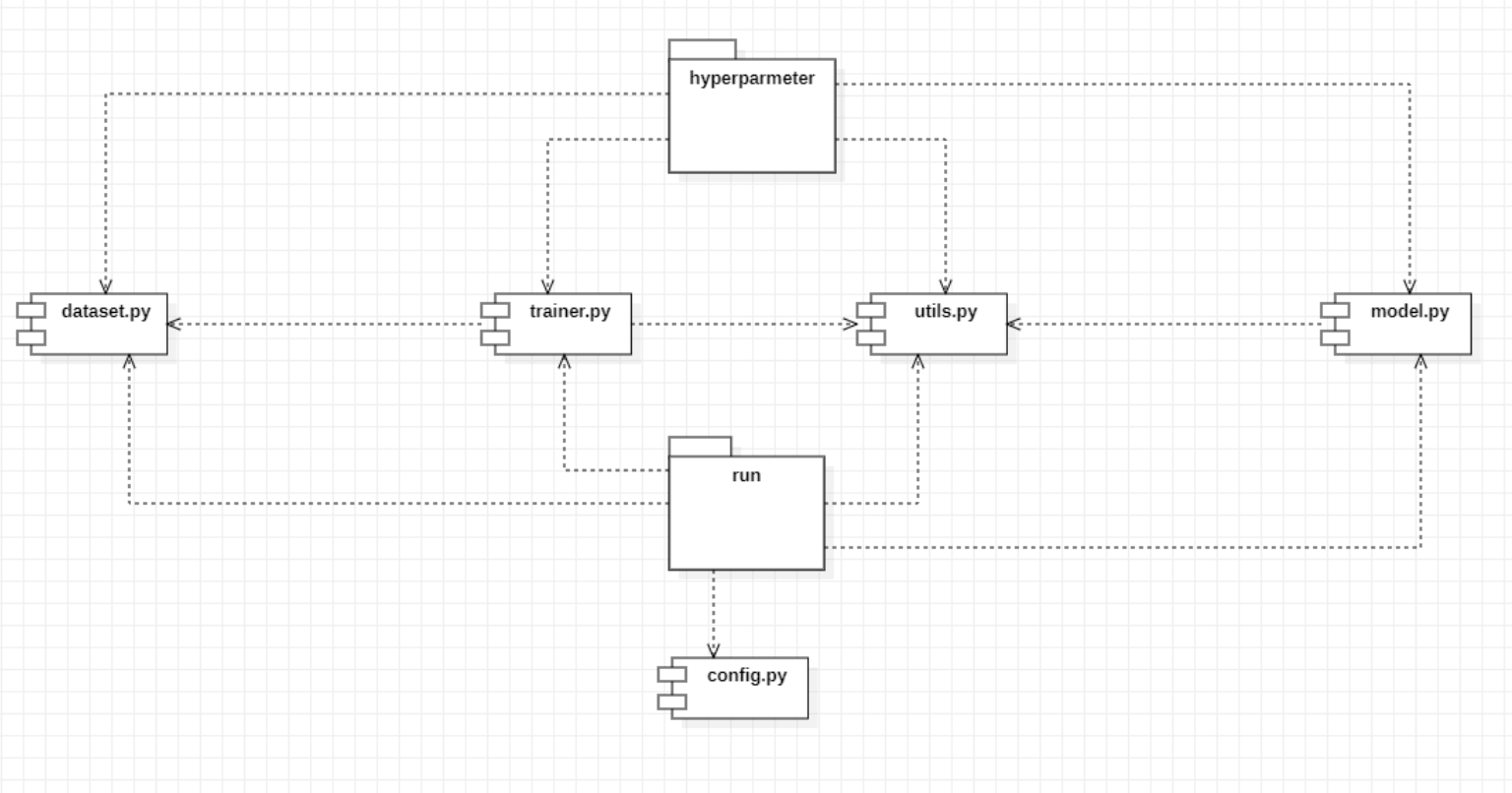
Execute, change stuff, execute

Who said reading code had to be hands off? You'll really start to understand things once you've broken everything and put it back together again. Remember those tests you got passing? Make them fail, add some more, or try changing the implementation without breaking them. Try adding a small feature that you think is cool, or setup project-wide logging so you can print output at various stages of the code. Is this still reading? Absolutely, but at this point its more of a choose your own adventure than a mystery novel. And that's a good thing!

GTN 컴포넌트 다이어그램



INMO 컴포넌트 다이어그램



문제 상황

```
14
15  from typing import Optional, Tuple
16  from torch_geometric.typing import Adj, OptTensor
17
18  import torch
19  from torch import Tensor
20  import torch.nn.functional as F
21  from torch_sparse import SparseTensor, matmul
22  from torch_geometric.nn.conv import MessagePassing
23  from torch_geometric.nn.conv.gcn_conv import gcn_norm
24  import torch.nn as nn
25  import torch.nn.functional as F
26
27  from torch_sparse import sum, mul, fill_diag, remove_diag
28  from torch.nn import Parameter
```

- 로컬에서의 개발 환경 세팅
- Execution의 단위 설정