



fstate

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And started to work on **fstate**



What is **fstate**?

Fstate is a tool for searching decays by the given final state.

Idea is quite simple:

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Let's see how it works...

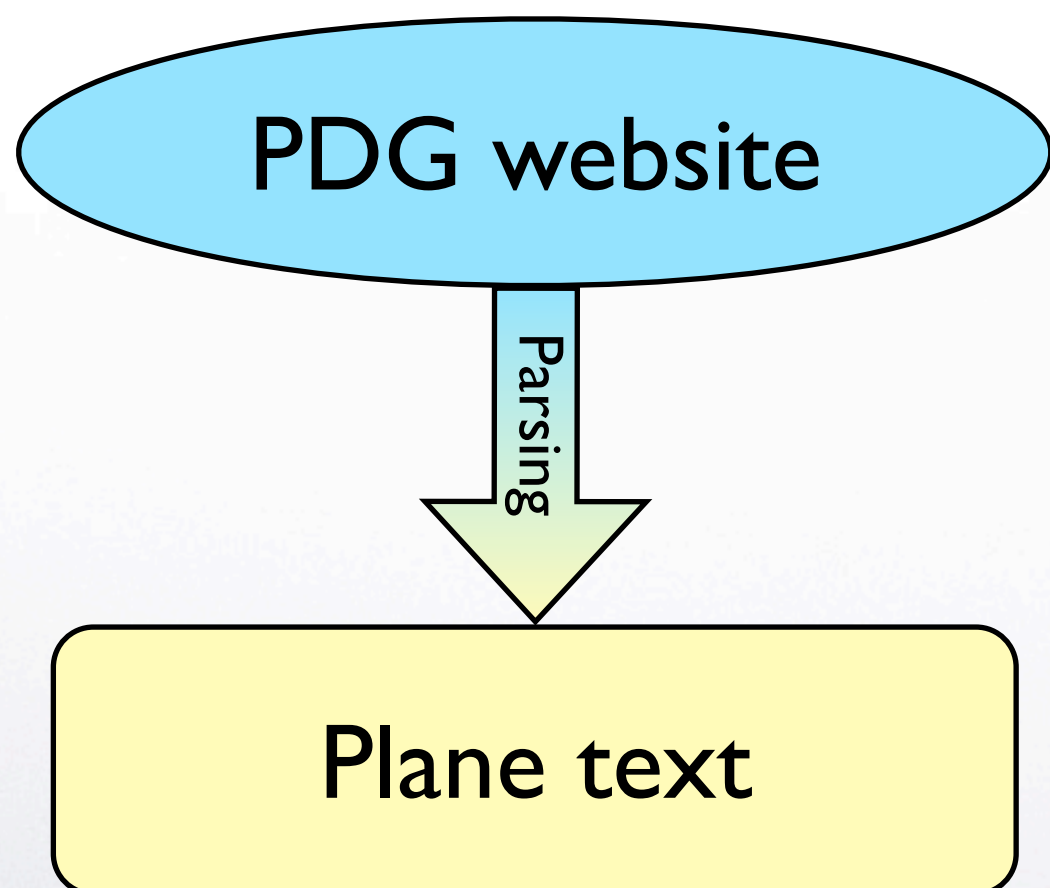


What's inside?

PDG website

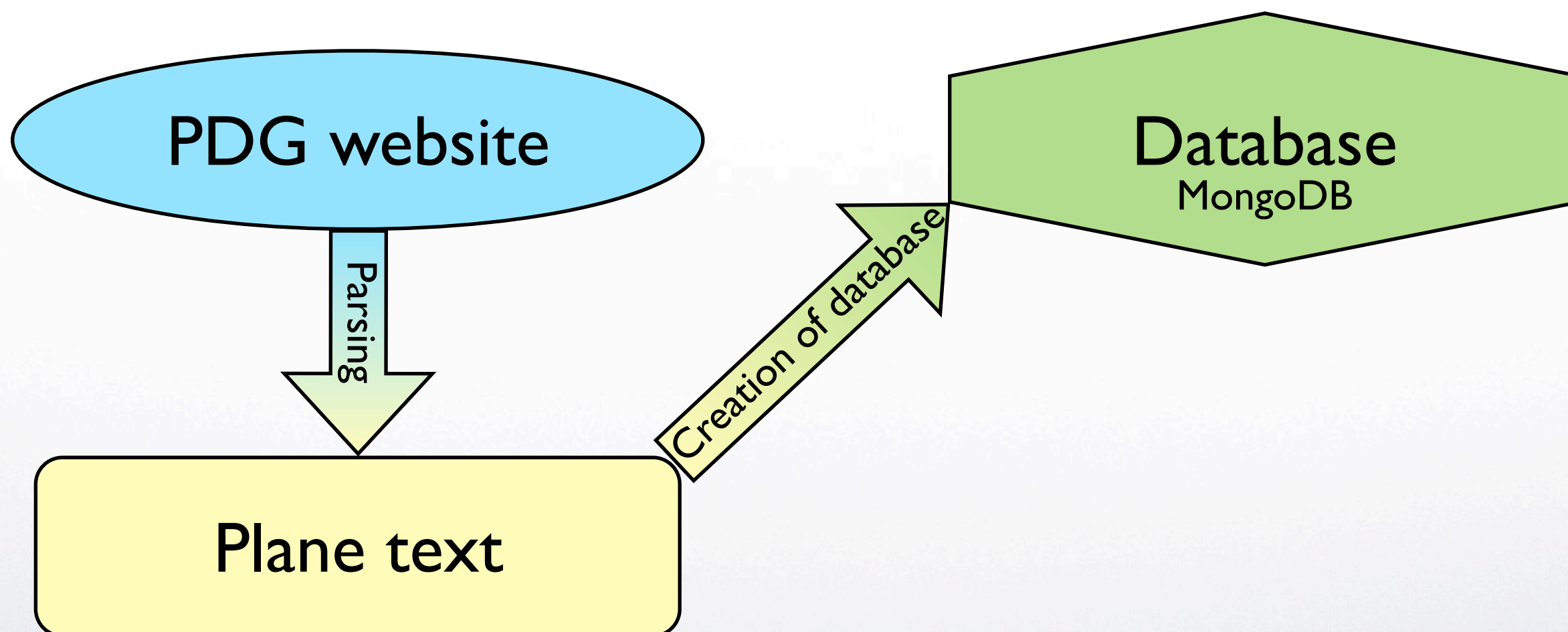


What's inside?



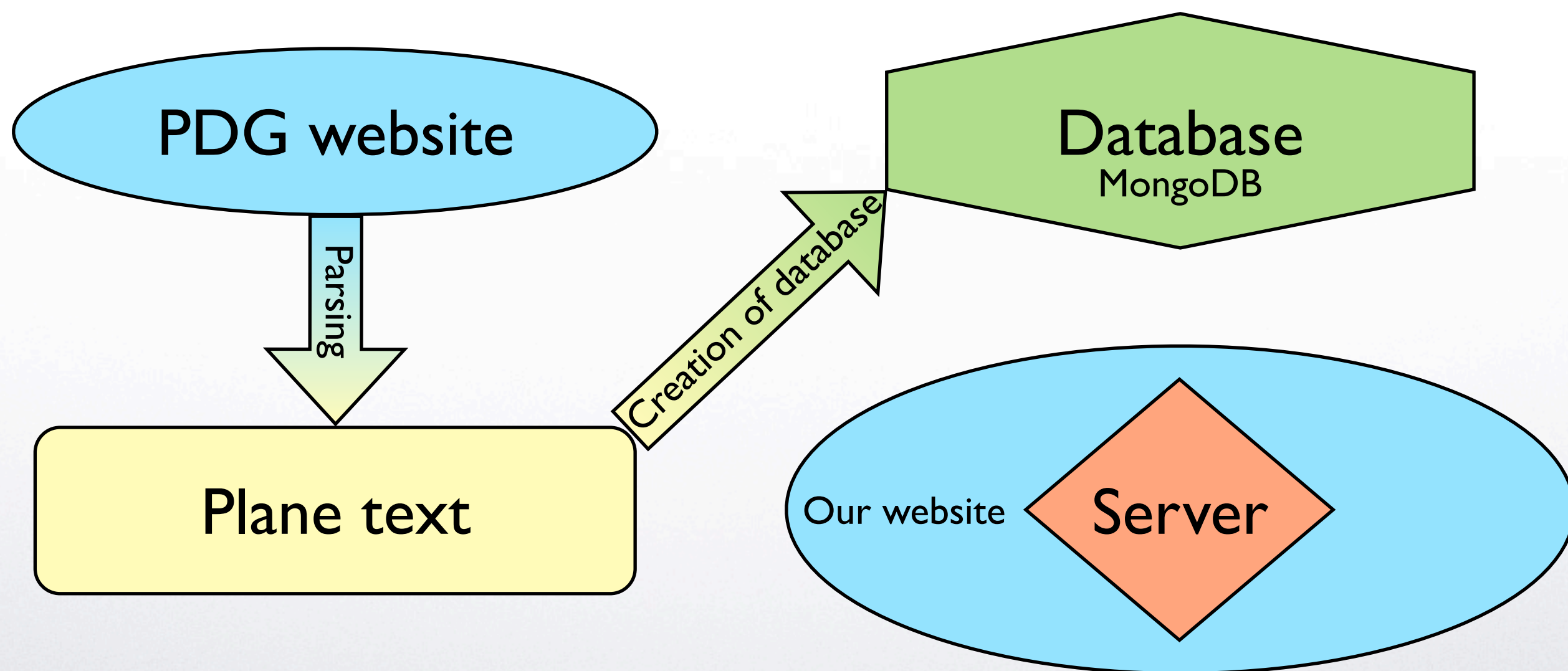


What's inside?



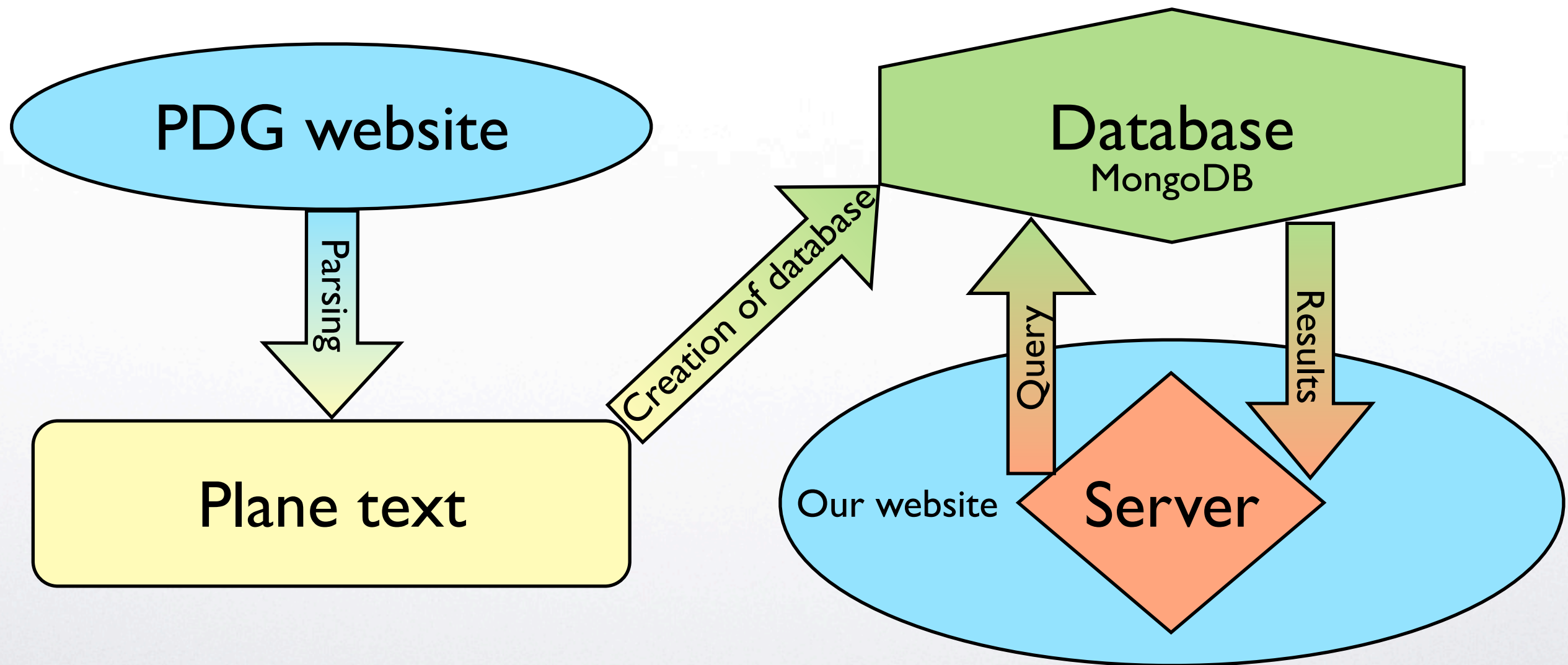


What's inside?





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Content?

- Plane text contain parsed PDG website.
 - Some of decays were not parsed correctly, so they should be added manually. Non-PDG decays can be added as well.
- At this moment database contain events with up to 5 particles final state and branching $> 10^{-10}$.
 - This is done due to demonstration purposes. In production these limits will be removed (if we'll have a powerful machine of course!).



System requirements?

- Creation of database
 - Core i7, 8Gb RAM - 40 minutes of machine time to create a base with all decays with branching $> 10^{-10}$.
- Server
 - At least 8 Gb (the size of database) RAM for fast search. More memory - faster search.



Plans

- Moving to the web in order to public test and crowd sourcing for filling the base by missing decays.
- Add a new features, such as:
 - results range by mass,
 - search a states with loosen or misidentified particle,
 - advanced query recognition,
 - ...?