

■■< HEAD ===== ■■> upstream/master

PBK

Author: Eugene A. Fedotov, Matthew Douglass, Jovaughn Chin

Version: 0.1

Licence: GNU Free Documentation License

The PBK package aims to be a Portable Kit for open-source Books. It is meant to provide a diverse selection of common graphical diagrams in select subjects. Currently, the focus is on compilers and programming in Java.

Dependencies

The following libraries are required to run PBK:

- [PGF 3.0](#)
- [PGF-TiKz](#)
- [LuaTex](#)

Libraries

Agenda (subject to change)

0.1 Sprint 1 : 3/9 - 3/13

1. Decide on a set of diagrams for each person.
2. Update design doc with a diagram example from the set that illustrates the output look.
3. Consider what possible options can be implemented.
4. Create a function, customized by user input, to generate diagram(s).

0.2 Sprint 2 : 3/16 - 3/20

1. Repeat Sprint 1, with next set of diagrams(CS discipline).
2. Update doc

0.3 Sprint 3 : 3/23 - 3/27

1. Repeat Sprint 1, with next set of diagrams from other disciplines(bio,physics,math..)
2. Update doc

0.4 Sprint 3 : 3/30 - 4/3

1. Work on special features mentioned in spec.
2. define function for color interchangeability
3. define function for pdf content links(bookmarking)

0.5 Sprint 4 : 4/6 - 4/9

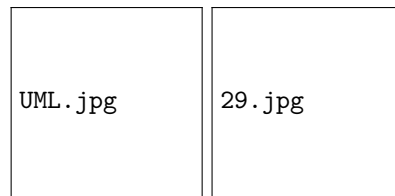
1. Test, upload the functions to the package, then CTAN.
2. Work on demo
3. Work on Symposium poster

API

Diagrams (subject to change)

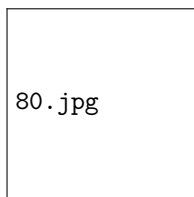
UML diagrams

1. Class diagram
2. Object diagram



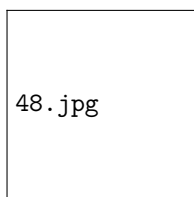
3. State diagram

Pushdown Stack

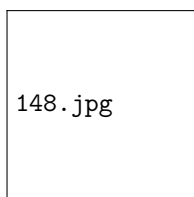


Linked List

Hash Table



Trees



Syntax Diagram

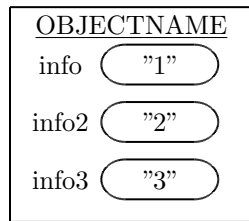


Figure 1: CAPTION HERE

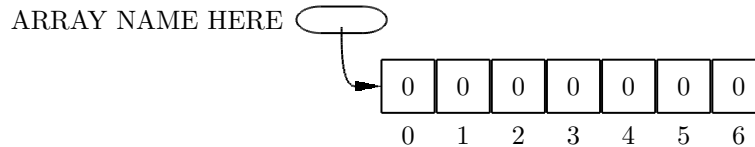


Figure 2: CAPTION HERE

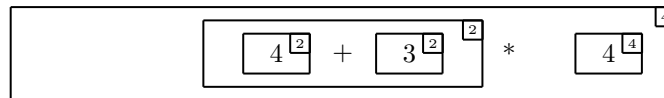


Figure 3: CAPTION HERE

Arrays

With Arrays the user will be able to input the information for the array name, caption name, length of the array and the actual values of the array.

Expressions

With Expressions the user will be able to edit the caption name, ??????

Classes

Objects

State Machines

1 User Input

Users will be able to create diagrams by editing a section near the top of the latex code. This section will be clearly defined, easily editable and understandable. Below is a work in progress of some latex code that the user will have to edit to create a diagram that fits their specs. The example below is specifically used when making array diagrams and is far from final.

```
User Input Below
\newcommand{\ArrayName}
{ARRAY NAME HERE}
\newcommand{\Caption}
{CAPTION HERE}
\newcommand{\ArrayLengthMinusOne}
{ARRAY LENGTH HERE}
\newcommand{\0}
{PLACE 0 VALUE HERE}
```

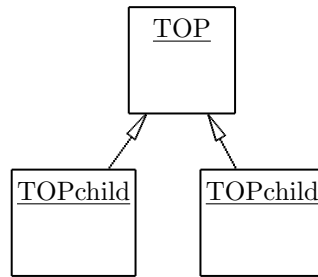


Figure 4: CAPTION HERE

```

\newcommand{\1}
{PLACE 1 VALUE HERE}
\newcommand{\2}
{PLACE 2 VALUE HERE}
\newcommand{\3}
{PLACE 3 VALUE HERE}
\newcommand{\4}
{PLACE 4 VALUE HERE}
User Input Above

```

The user will find the location in the template that clearly states "User Input Below" and edit below that until they come to "User Input Above". The user will edit only the statements that are in CAPS being careful not to edit anything besides that. For example if the user wanted to create an array diagram that holds 4 values they would look for "ARRAY LENGTH HERE". After finding this they would replace the text in CAPS with an integer. The user would then compile the LATEX code to find a array diagram to the users specs. Above the user input area there will be information regarding what inputs are acceptable for the template.

Change History

v0.1
General: Initial version1