

Istanbul Technical University
Faculty of Computer and Informatics
Computer Engineering Department

BLG 100E
The Glorious L^AT_EX
Report

Group MadCoders
Besim Ongun Kanat - 150120047

December 2nd, 2016

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1 Introduction

I made a L^AT_EX template to help my friends on creating good looking reports.

2 General stuff

2.1 Text styles

You can make text **bold**, *italic*, underlined or in typewriter fonts. You can ***use*** them **combined**

You can make paragraphs centered

Or right aligned

The important paragraph: We can create titled paragraphs

2.2 Enumeration and lists

With the help of *enumitem* package we can create numbered lists as below:

1 Apples (We can use nested lists)

A) Starking

B) Golden

2 Kiwis

3 and of course Bananas!

We can also create unordered lists

- Ford Prefect
- Arthur Dent
- Zaphod Beeblebrox

2.3 Tables

Creating tables can become a bit annoying the [H] here ensures the table is displayed where it is defined.

Table 1: Table of great music

left column center aligned	center column right aligned	right column left aligned
I want to break free	We're the champions	Bohemian Rhapsody

7C0	hexadecimal
3700	octal
11111000000	binary
1984	decimal

For more info consult [Wikibooks](#).

We can continue here but...

sometimes a clear page in our life is much better.

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3 Images and Figures

We can include images like:

Figure 1: GTA



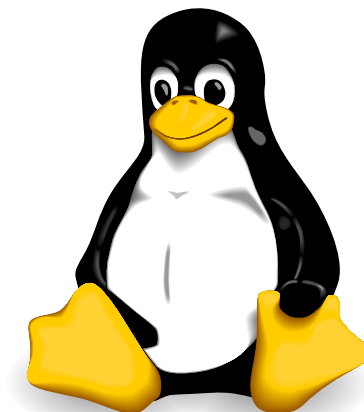
scale them relative to page width

Figure 2: GTA2



or even we can include PDFs (tip: Save SVG images as PDF) and they can scale (try to zoom in, it will not get pixelated)

Figure 3: Linux's mascot: Tux



4 Inserting Code Pieces

4.1 Pseudocode

Algorithm 1 The depth first search algorithm

Graph G
Node $start$
function DEPTH-FIRST-SEARCH($G, start$)
 Tree T ▷ The resulting search tree
 Stack S ▷ An empty stack
 Set V ▷ An empty set of visited nodes
 SET-ROOT($T, current$)
 PUSH($S, start$)
 while NOT-EMPTY(S) **do**
 $current \leftarrow$ POP(S)
 if not CONTAINS($V, current$) **then**
 INSERT($V, current$)
 for all $n : \text{NEIGHBORS}(current)$ **do**
 PUSH(S, n)
 INSERT-SUB-NODE($T, current, n$) ▷ Insert node to subtree of $current$
 end for
 end if
 end while
 return T
end function

4.2 Real Code

Code 1: Depth first search

```
class Graph
{
    set<int> nodes;
    vector< vector<int> > edge_list;
public:
    void dfs();
}
```
