



# GNU Emacs

THE TRUE TEXT EDITOR

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March 25, 2022

Free Software Foundation

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## Code

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## Code i

```
1  // SPDX-License-Identifier: GPL-3.0
2  pragma solidity >= 0.7.0 < 0.9.0;
3  contract SimpleAuction {
4      address payable public beneficiary;
5      uint public auctionEndTime;
6
7      address public highestBidder;
8      uint public highestBid;
9
10     mapping(address => uint) pendingReturns;
11     bool ended;
12
13     event HighestBidIncreased(address bidder, uint amount);
14     event AuctionEnded(address winner, uint amount);
```

## Code ii

```
15
16
17     constructor(
18         uint _biddingTime,
19         address payable _beneficiary
20     )
21     {
22         beneficiary = _beneficiary;
23         auctionEndTime = block.timestamp + _biddingTime;
24     }
25
26     function bid() public payable {
27         require(block.timestamp <= auctionEndTime, "Auction already ended.");
28     }
```

## Code iii

```
28     require(msg.value > highestBid, "There already is a higher bid.");
29
30     if(highestBid != 0)
31     {
32         pendingReturns[highestBidder] += highestBid;
33     }
34     highestBidder = msg.sender;
35     highestBid = msg.value;
36     emit HighestBidIncreased(msg.sender, msg.value);
37 }
38
39 function withdraw()
40     public returns
41     (bool)
```

## Code iv

```
42 {
43     uint amount = pendingReturns[msg.sender];
44     if(amount > 0)
45     {
46         pendingReturns[msg.sender] = 0;
47
48         if(!payable(msg.sender).send(amount))
49         {
50             pendingReturns[msg.sender] = amount;
51             return false;
52         }
53     }
54     return true;
55 }
```

```
56
57 function auctionEnd()
58     public
59     {
60         require(block.timestamp >= auctionEndTime, "Auction not yet ended.");
61         require(!ended, "auctionEnd has already been called.");
62         ended = true;
63         emit AuctionEnded(highestBidder, highestBid);
64         beneficiary.transfer(highestBid);
65     }
66 }
```



# Introduction

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```
\documentclass{beamer}  
\usetheme{metropolis}
```

# Sections

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Sections group slides of the same topic

```
\section{Elements}
```

## Title formats

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**Metropolis** supports 4 different title formats:

- Regular
- SMALL CAPS
- ALL SMALL CAPS
- ALL CAPS

They can either be set at once for every title type or individually.

This frame uses the `SMALLCAPS` title format.

### Potential Problems

Be aware that not every font supports small caps. If for example you typeset your presentation with pdfTeX and the Computer Modern Sans Serif font, every text in small caps will be typeset with the Computer Modern Serif font instead.

This frame uses the `allsmallcaps` title format.

### Potential problems

As this title format also uses small caps you face the same problems as with the `smallcaps` title format. Additionally this format can cause some other problems. Please refer to the documentation if you consider using it.

As a rule of thumb: just use it for plaintext-only titles.

This frame uses the `allcaps` title format.

## Potential Problems

This title format is not as problematic as the `allsmallcaps` format, but basically suffers from the same deficiencies. So please have a look at the documentation if you want to use it.



# Elements

---

The theme provides sensible defaults to  
`\emph{emphasize}` text, `\alert{accent}` parts  
or show `\textbf{bold}` results.

becomes

The theme provides sensible defaults to *emphasize* text, **accent** parts or show **bold** results.

## Font feature test

- Regular
- *Italic*
- SMALL CAPS
- **Bold**
- **Bold Italic**
- **Bold Small Caps**
- Monospace
- *Monospace Italic*
- Monospace Bold
- *Monospace Bold Italic*

# Lists

## Items

- Milk
- Eggs
- Potatoes

## Enumerations 1.

1. First,
2. Second and
3. Last.

## Enumerations A.

- A. First,
- B. Second and
- C. Last.

## Descriptions

**PowerPoint** Meeh.  
**Beamer** Yeeeha.  
**Google** Naah.

- This is important
- 
- And now this

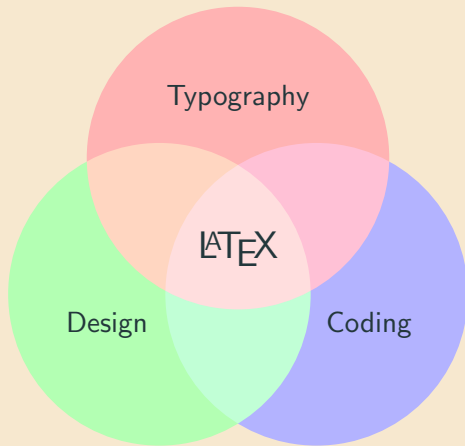
- This is important
- Now this
- And now this

- This is important
- Now this
- And now this

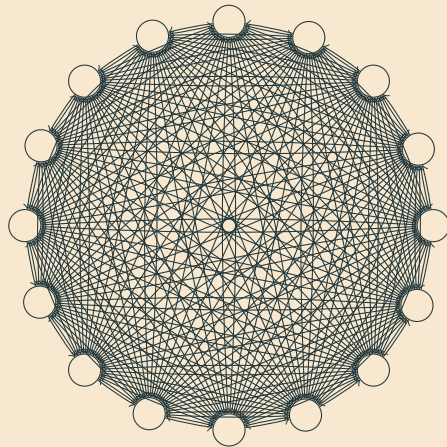
- **This is really important**
- Now this
- And now this



- This is really important
- I Love You ♥
- And now this



**Figure 1:** A Venn diagram from texample.net.



**Figure 2:** Complete graph from texample.net.

**Table 1:** Largest cities in the world (source: Wikipedia)

| City        | Country | Population |
|-------------|---------|------------|
| Tokyo       | Japan   | 37,400,068 |
| Delhi       | India   | 28,514,000 |
| Shanghai    | China   | 25,582,000 |
| São Paulo   | Brazil  | 21,650,000 |
| Mexico City | Mexico  | 21,581,000 |
| Cairo       | Egypt   | 20,076,000 |

# Blocks

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Three different block environments are pre-defined and may be styled with an optional background color.

## Default

Block content.

## Alert

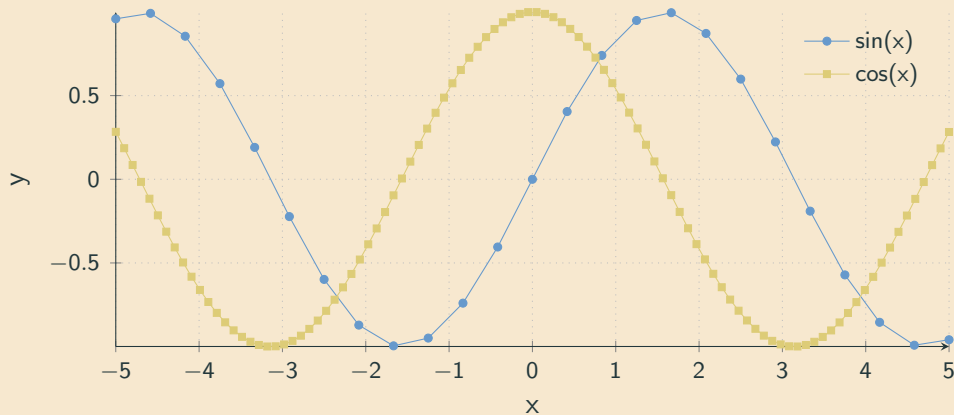
Block content.

## Example

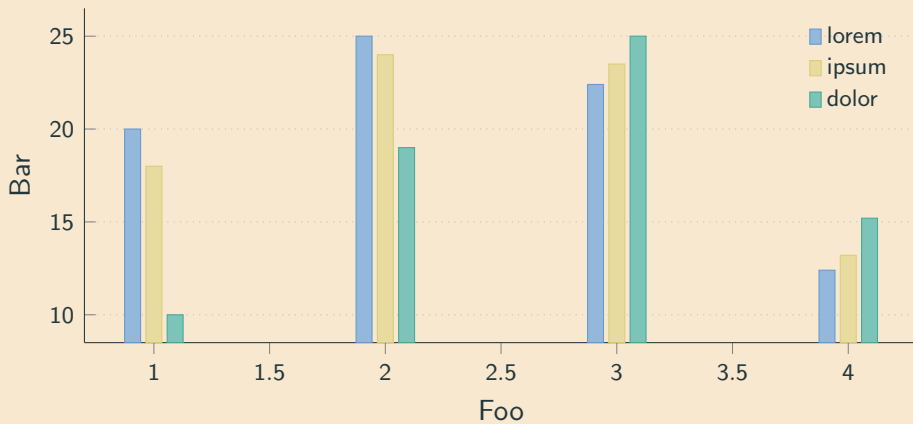
Block content.

$$\phi(ab) = \phi(a) \cdot \phi(b) \cdot \frac{d}{\phi(d)}$$

## Line plots



## Bar charts





*My general working style is to write everything first with pencil and paper, sitting beside a big wastebasket. Then I use Emacs to enter the text into my machine.*

*— Donald E. Knuth*

**Metropolis** defines a custom beamer template to add a text to the footer. It can be set via

```
\setbeamertemplate{frame footer}{My custom footer}
```

Some references to showcase `[allowframebreaks]` [1, 3, 6, 2, 7, 4, 5]

## Conclusion

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`https://www.gnu.org/software/emacs/`

**Questions?**




## Backup slides

Sometimes, it is useful to add slides at the end of your presentation to refer to during audience questions.

The best way to do this is to include the `appendixnumberbeamer` package in your preamble and call `\appendix` before your backup slides.




Slide numbering and progress bars for slides in the appendix will automatically be turned off.


## References i

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## References ii

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-  J. Mentor.  
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