designers
&
hackers

goal:

motivate you to
pay attention to design
when developing

design?

usability + accessibility

interaction design

information architecture

information design, organization, findability

visual design

“to contrive for a purpose, to project for the attainment of a particular end”

- *The Century Dictionary*, 1911

osborn-parnes

creative problem solving

process

explore the challenge

DEFINE THE GOAL

GATHER DATA

DEFINE THE SCOPE

generate ideas

prepare for action

FIND AN OPTIMAL SOLUTION

PREPARE TO IMPLEMENT IT

principles

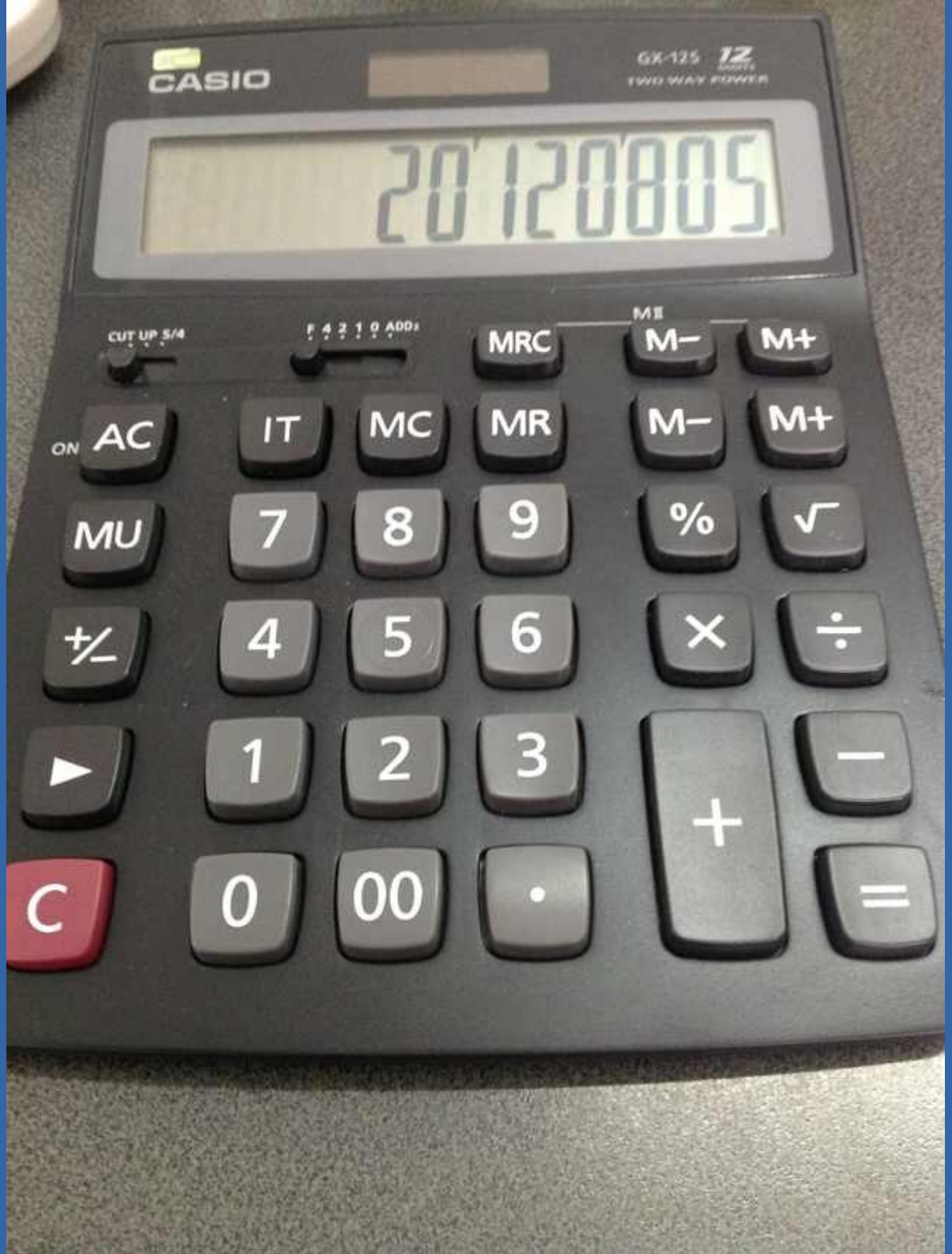
by Mozilla (w/ Alex Faaborg), based on work by Donald Norman, Jakob Nielsen, & Alan Cooper

SPEEDY

$$\text{TIME FOR MOVEMENT} = \text{DEVICE LAG} + \text{DEVICE SPEED} \log_2\left(1 + \frac{\text{DISTANCE}}{\text{TARGET WIDTH ALONG AXIS OF MOTION}}\right)$$

fitts's law

ux-visual-hierarchy


CASIO
GX-12S
TWO WAY POWER
20120805
CUT UP 5/4
F 4 2 1 0 ADD2
MRC
M−
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IT
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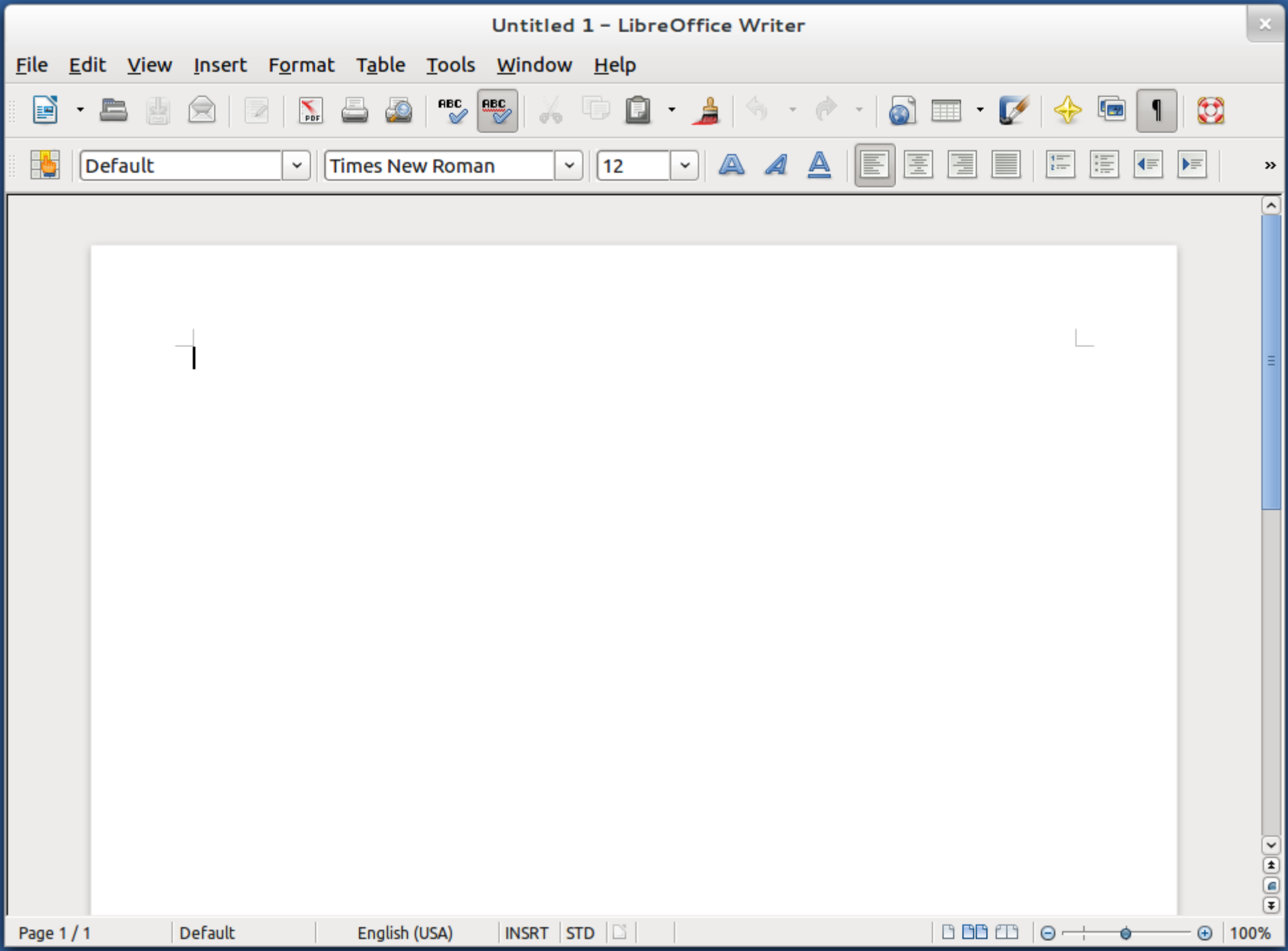
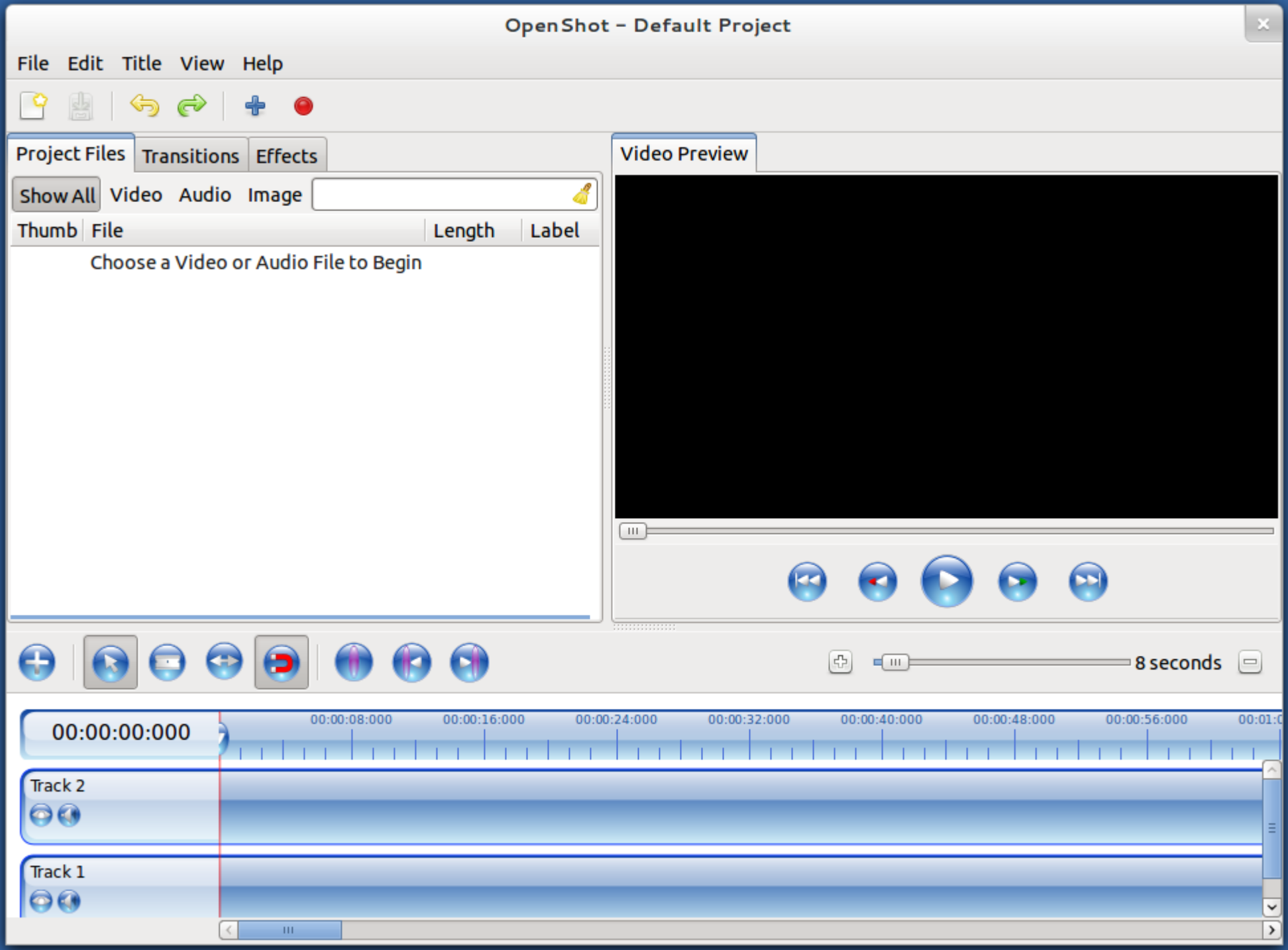

Untitled 1 – LibreOffice Writer
File Edit View Insert Format Table Tools Window Help
Default
Times New Roman
12
Page 1 / 1
Default
English (USA)
INSRT
STD
100%

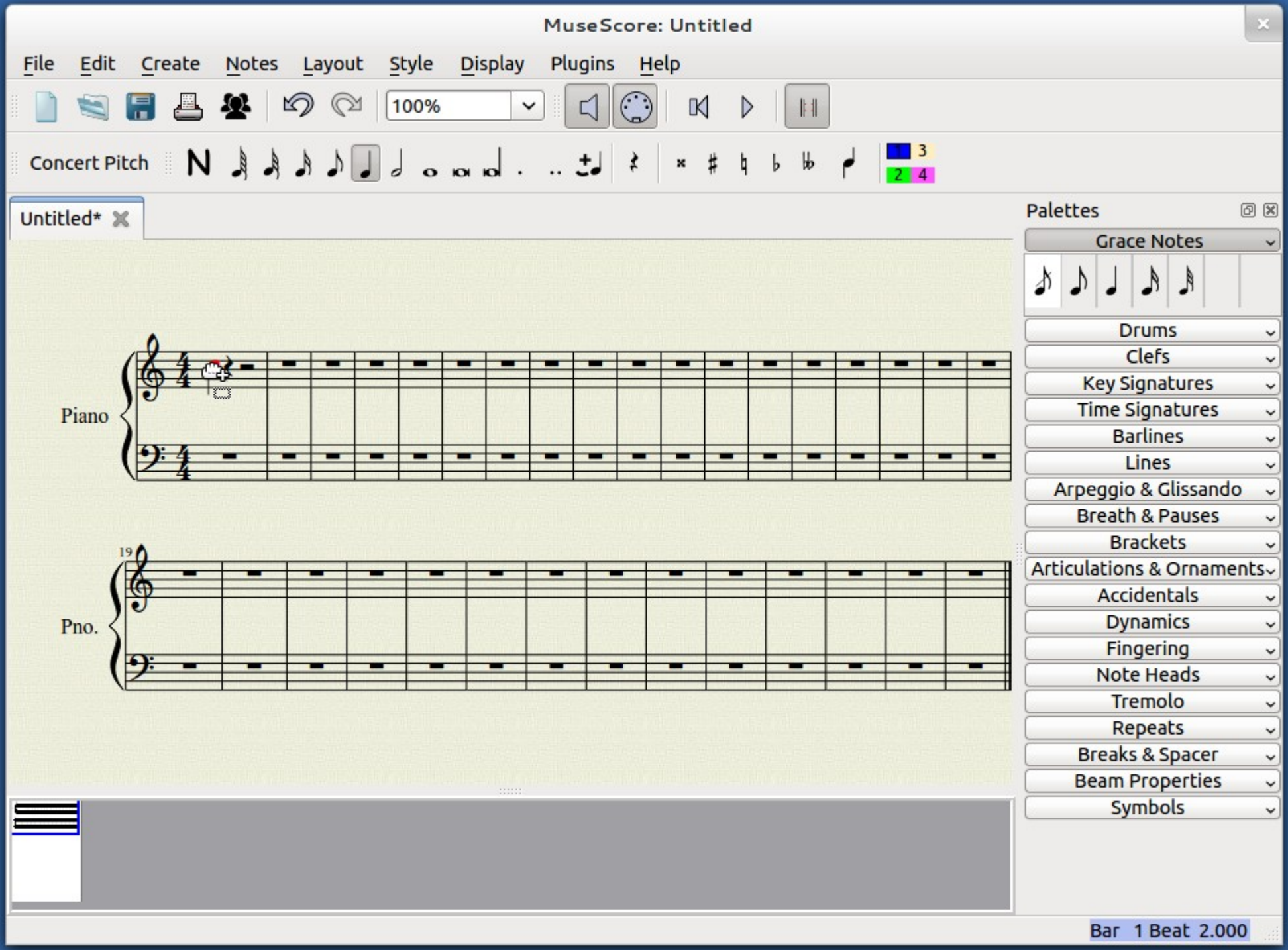
TIME TO CHOOSE =

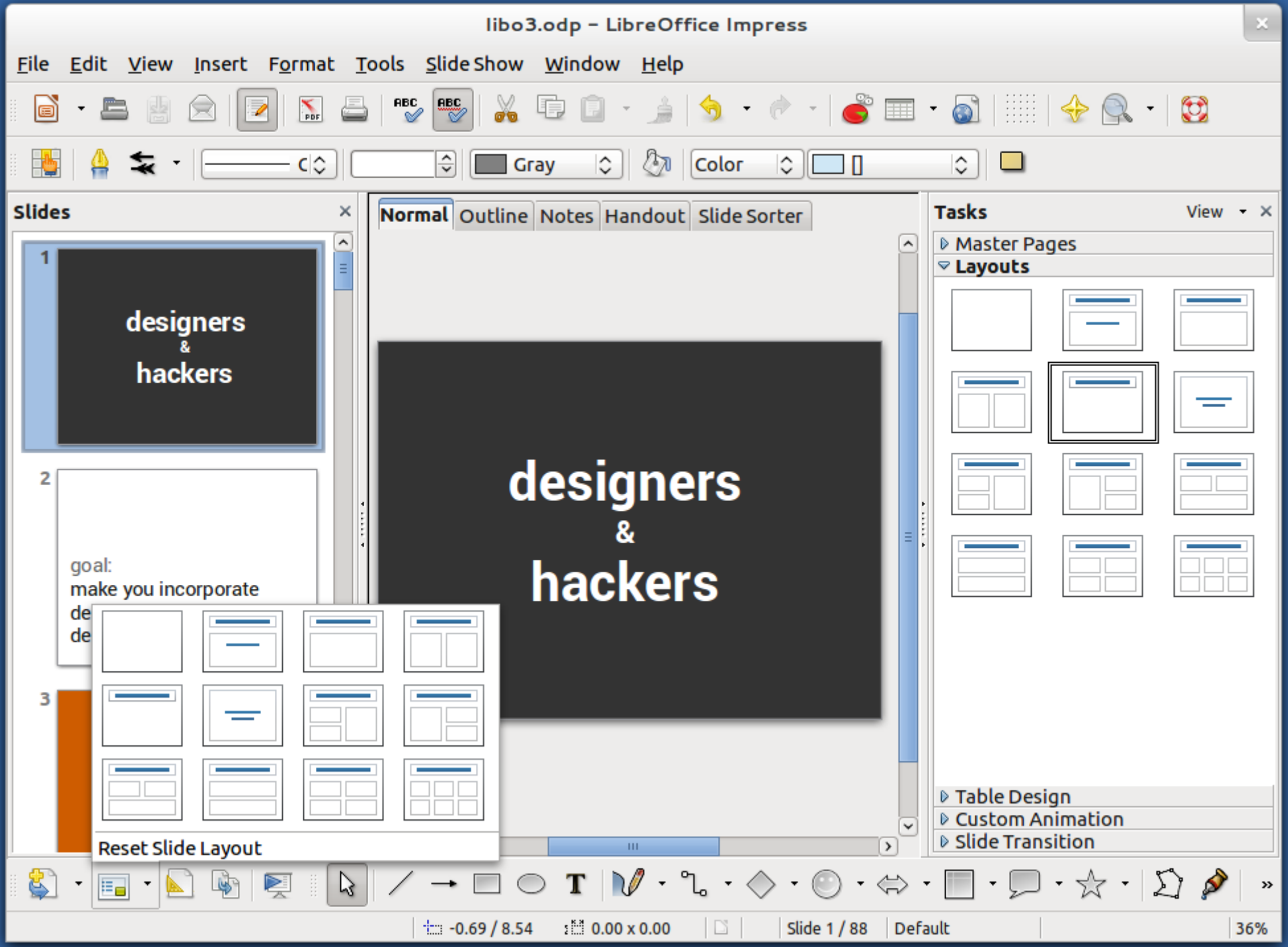
$$\text{MENTAL PROCESS SPEED} \sum_{i=1}^{n} \text{PROBABILITY OF CHOICE i} \log_2 (1 / \text{PROBABILITY OF CHOICE i} + 1)$$

hick's law

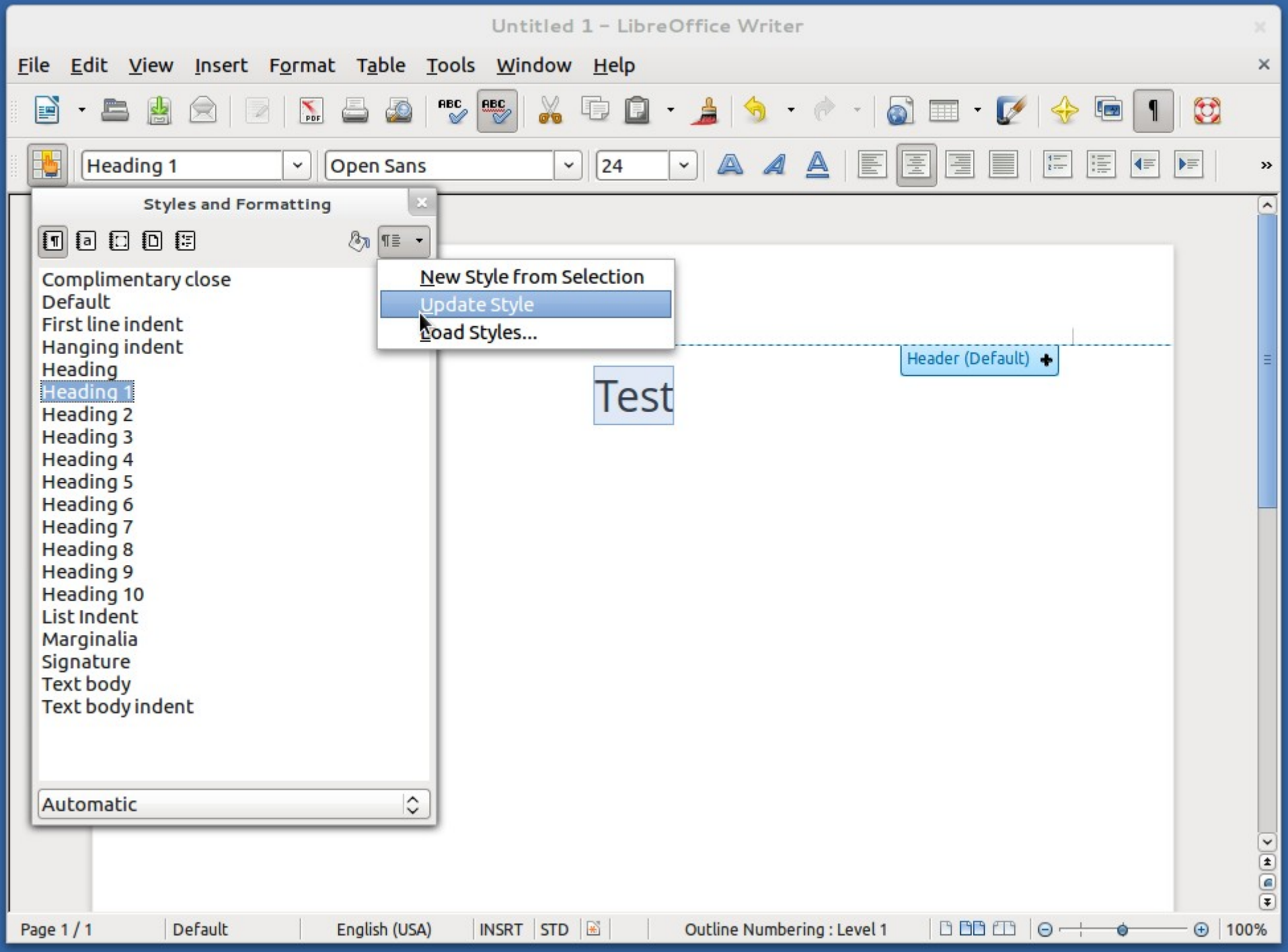
ux-minimalism


OpenShot – Default Project
File
Edit
Title
View
Help
Project Files
Transitions
Effects
Show All
Video
Audio
Image
Thumb
File
Length
Label
Choose a Video or Audio File to Begin
Video Preview
8 seconds
00:00:00:000
00:00:08:000
00:00:16:000
00:00:24:000
00:00:32:000
00:00:40:000
00:00:48:000
00:00:56:000
Track 2
Track 1


MuseScore: Untitled
File
Edit
Create
Notes
Layout
Style
Display
Plugins
Help
100%
Concert Pitch
Untitled*
Piano
19
Pno.
Palettes
Grace Notes
Drums
Clefs
Key Signatures
Time Signatures
Barlines
Lines
Arpeggio & Glissando
Breath & Pauses
Brackets
Articulations & Ornaments
Accidentals
Dynamics
Fingering
Note Heads
Tremolo
Repeats
Breaks & Spacer
Beam Properties
Symbols
Bar 1 Beat 2.000


libo3.odp – LibreOffice Impress
File Edit View Insert Format Tools Slide Show Window Help
Gray
Color
Slides
1
designers
&
hackers
2
goal:
make you incorporate
3
Normal Outline Notes Handout Slide Sorter
designers
&
hackers
Tasks
View
Master Pages
Layouts
Table Design
Custom Animation
Slide Transition
Reset Slide Layout
-0.69 / 8.54
0.00 x 0.00
Slide 1 / 88
Default
36%

ux-efficiency


Untitled 1 – LibreOffice Writer
File Edit View Insert Format Table Tools Window Help
Heading 1
Open Sans
24
Styles and Formatting
New Style from Selection
Update Style
Load Styles...
Complimentary close
Default
First line indent
Hanging indent
Heading
Heading 1
Heading 2
Heading 3
Heading 4
Heading 5
Heading 6
Heading 7
Heading 8
Heading 9
Heading 10
List Indent
Marginalia
Signature
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Automatic
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Test
Page 1 / 1
Default
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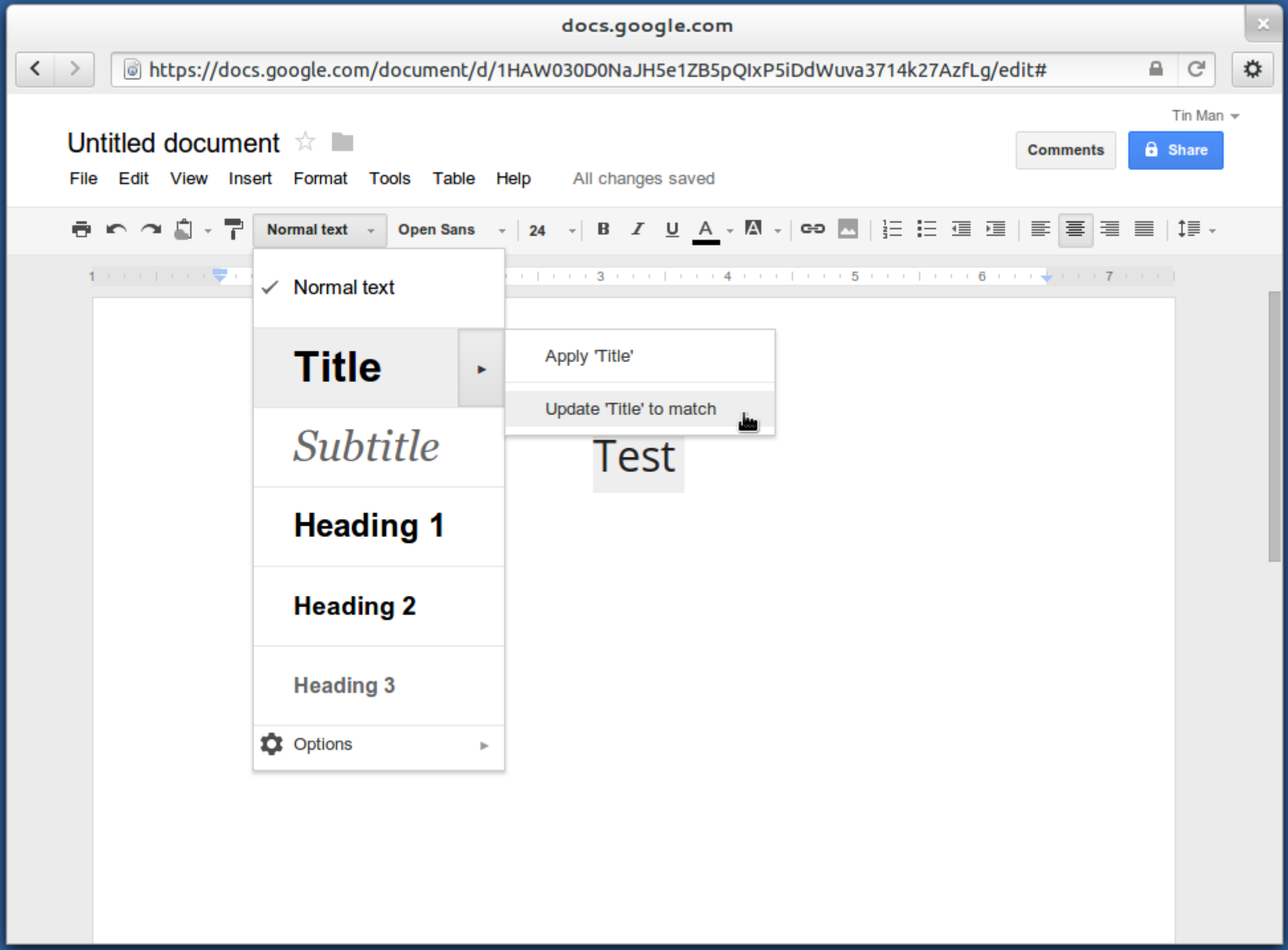
100%


docs.google.com
https://docs.google.com/document/d/1HAW030D0NaJH5e1ZB5pQIxP5iDdWuva3714k27AzfLg/edit#
Tin Man
Untitled document
Comments
Share
File Edit View Insert Format Tools Table Help
All changes saved
Normal text
Open Sans
24
Normal text
Title
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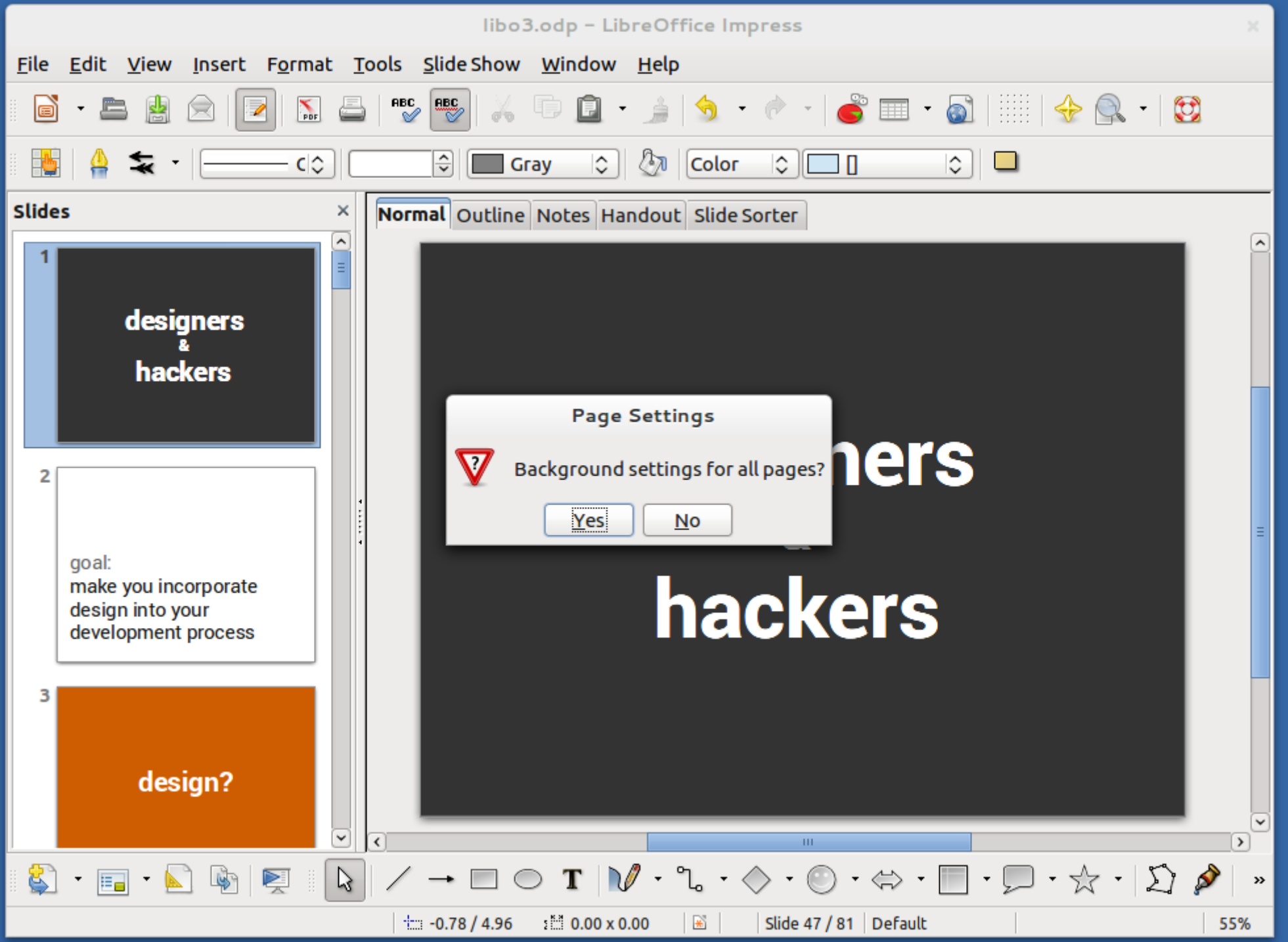
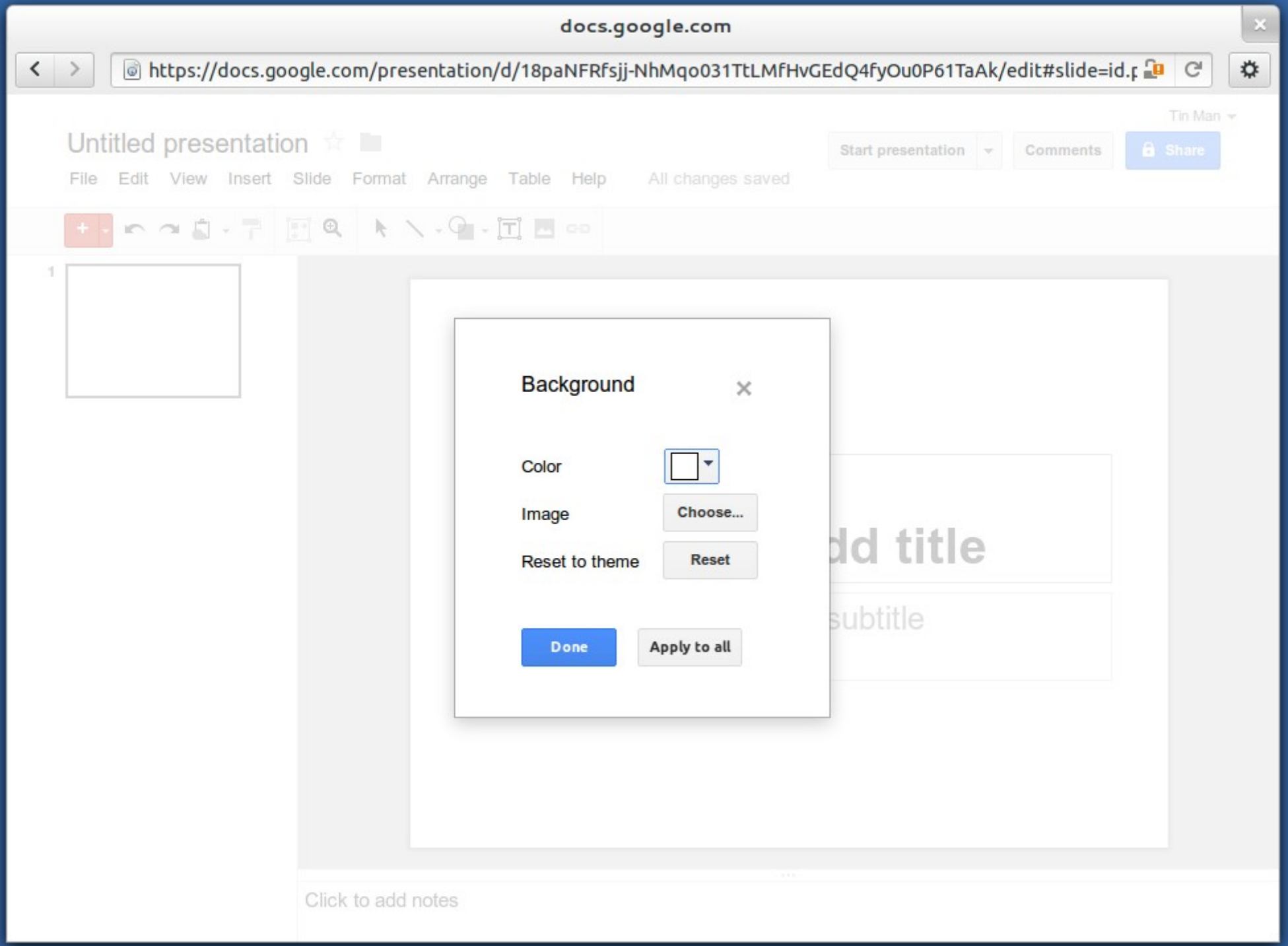
Heading 1
Heading 2
Heading 3
Options
Apply 'Title'
Update 'Title' to match
Test

ux-interruption

HIGH FIDELITY
HF
SONY
B


libo3.odp – LibreOffice Impress
File Edit View Insert Format Tools Slide Show Window Help
Gray
Color
Slides
1
designers
&
hackers
2
goal:
make you incorporate
design into your
development process
3
design?
Normal Outline Notes Handout Slide Sorter
Page Settings
Background settings for all pages?
Yes
No
hackers
-0.78 / 4.96
0.00 x 0.00
Slide 47 / 81
Default
55%


docs.google.com
https://docs.google.com/presentation/d/18paNFRfsjj-NhMqo031TtLMfHvGEdQ4fyOu0P61TaAk/edit#slide=id.p
Untitled presentation
File Edit View Insert Slide Format Arrange Table Help
All changes saved
Tin Man
Start presentation
Comments
Share
1
Background
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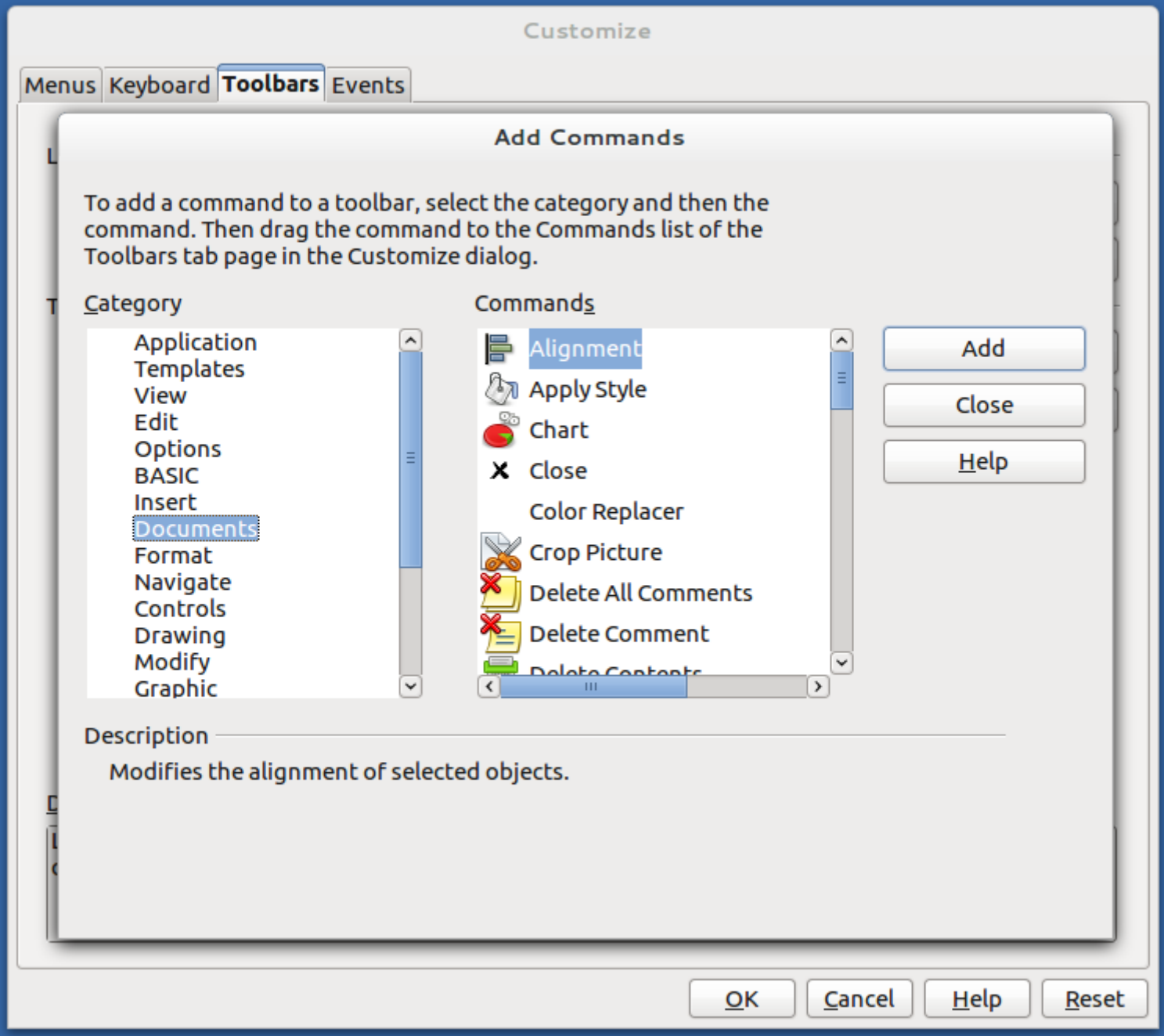
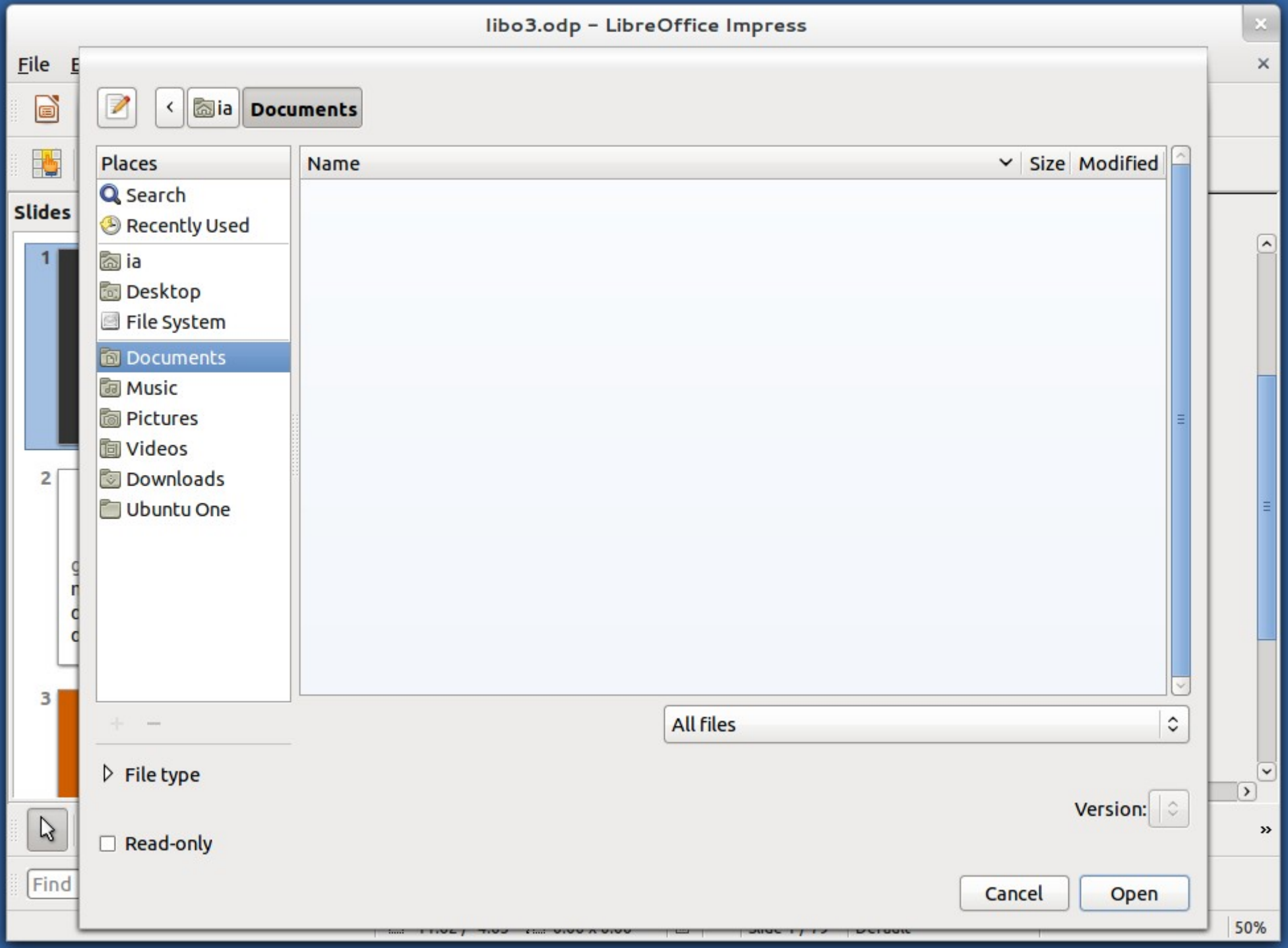
Choose...
Reset to theme
Reset
Done
Apply to all
dd title
subtitle
Click to add notes

ux-consistency


Customize
Menus
Keyboard
Toolbars
Events
Add Commands
To add a command to a toolbar, select the category and then the command. Then drag the command to the Commands list of the Toolbars tab page in the Customize dialog.
Category
Application
Templates
View
Edit
Options
BASIC
Insert
Documents
Format
Navigate
Controls
Drawing
Modify
Graphic
Commands
Alignment
Apply Style
Chart
Close
Color Replacer
Crop Picture
Delete All Comments
Delete Comment
Add
Close
Help
Description
Modifies the alignment of selected objects.
OK
Cancel
Help
Reset


libo3.odp – LibreOffice Impress
File
Slides
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Find
50%
ia
Documents
Places
Search
Recently Used
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Desktop
File System
Documents
Music
Pictures
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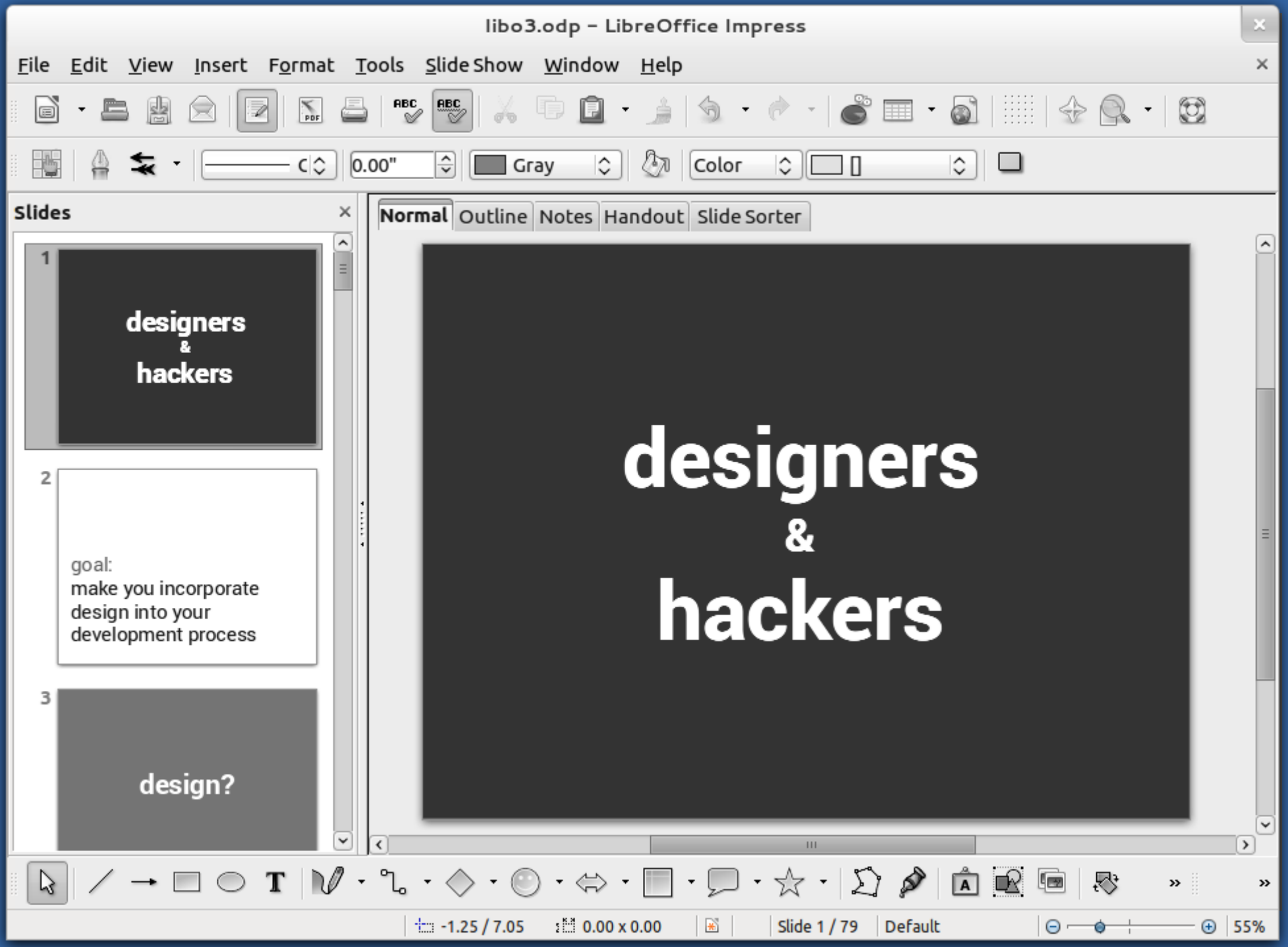
Modified
All files
File type
Version:
Read-only
Cancel
Open

SELF-EXPLANATORY

ux-affordance


libo3.odp – LibreOffice Impress
File Edit View Insert Format Tools Slide Show Window Help
Slides
1
designers & hackers
2
goal:
make you incorporate design into your development process
3
design?
Normal Outline Notes Handout Slide Sorter
designers & hackers
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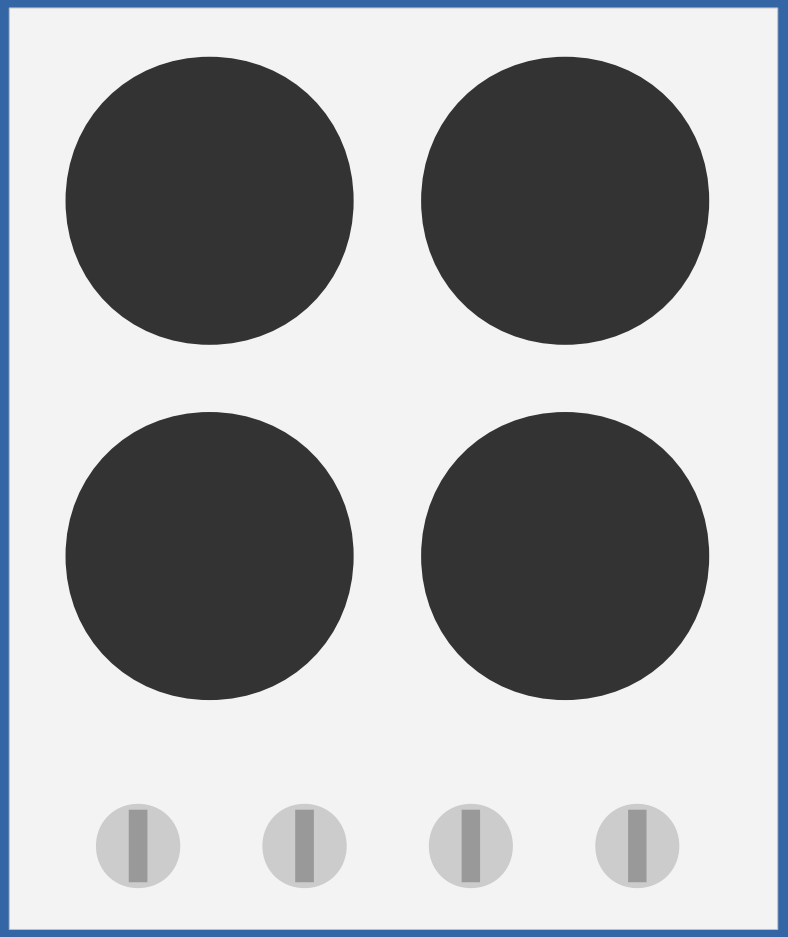
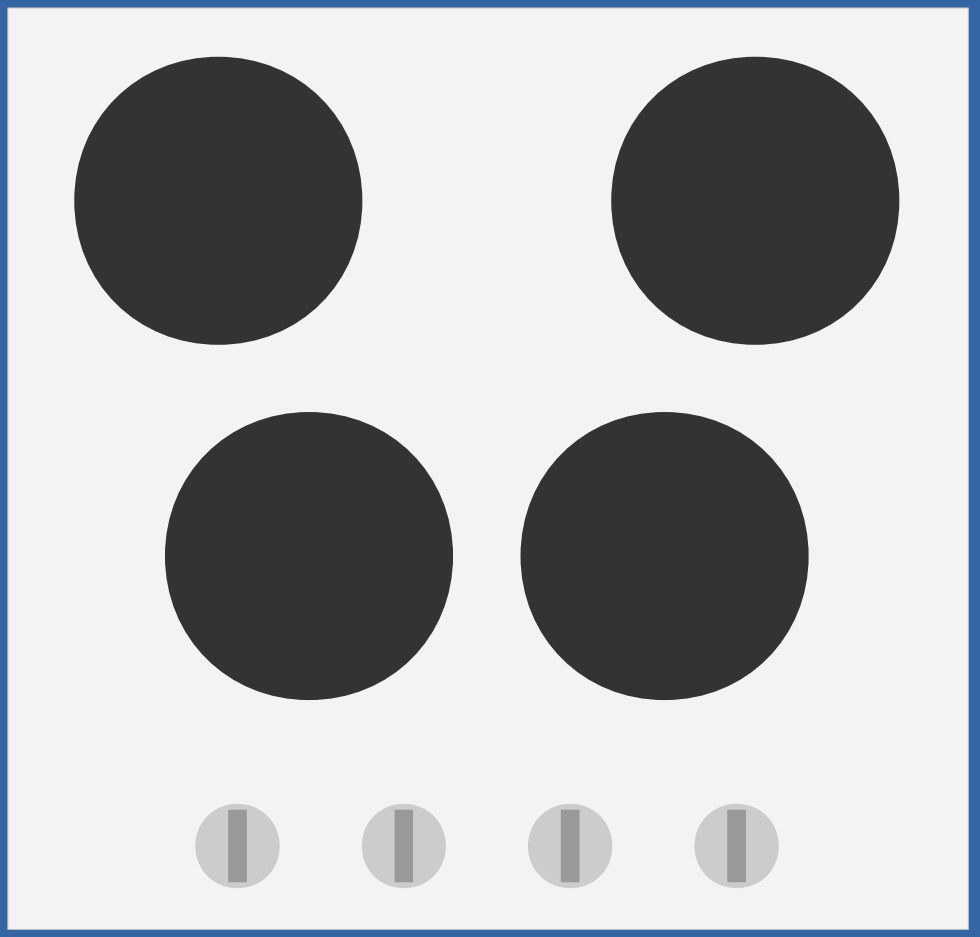
0.00 x 0.00
Slide 1 / 79
Default
55%

ux-natural-mapping





libo3.odp – LibreOffice Impress

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Default 0 %

Slides

DEFINE THE SCOPE
what to solve restrictions

9 generate ideas

10 prepare for action
FIND AN OPTIMAL SOLUTION
PREPARE TO IMPLEMENT IT

11

Normal Outline Notes Handout Slide Sorter

Find

Bitmap selected 0.00 / 2.17 11.02 x 5.03 Slide 9 / 79 Default 50%

Untitled 1 – LibreOffice Writer

File Edit View Insert Format Table Tools Window Help

Graphics

Picture

Type Options Wrap Hyperlink Picture Crop Borders Background Macro

Crop

Keep scale

Keep image size

Left 0.00" Top 0.00"

Right 0.00" Bottom 0.00"

Scale

Width 49%

Height 49%

Image size

Width 6.93"

Height 3.16"

14.23"×6.50" (96 PPI)

Original Size

OK Cancel Help Reset

Default 0 %

Page 1 / 1 Default INSRT STD 0.00 / 0.42 6.93 x 3.16 100%

ux-feedback

1
2 ABC
3 DEF
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6 MNO
7 PQRS
8 TUV
9 WXYZ
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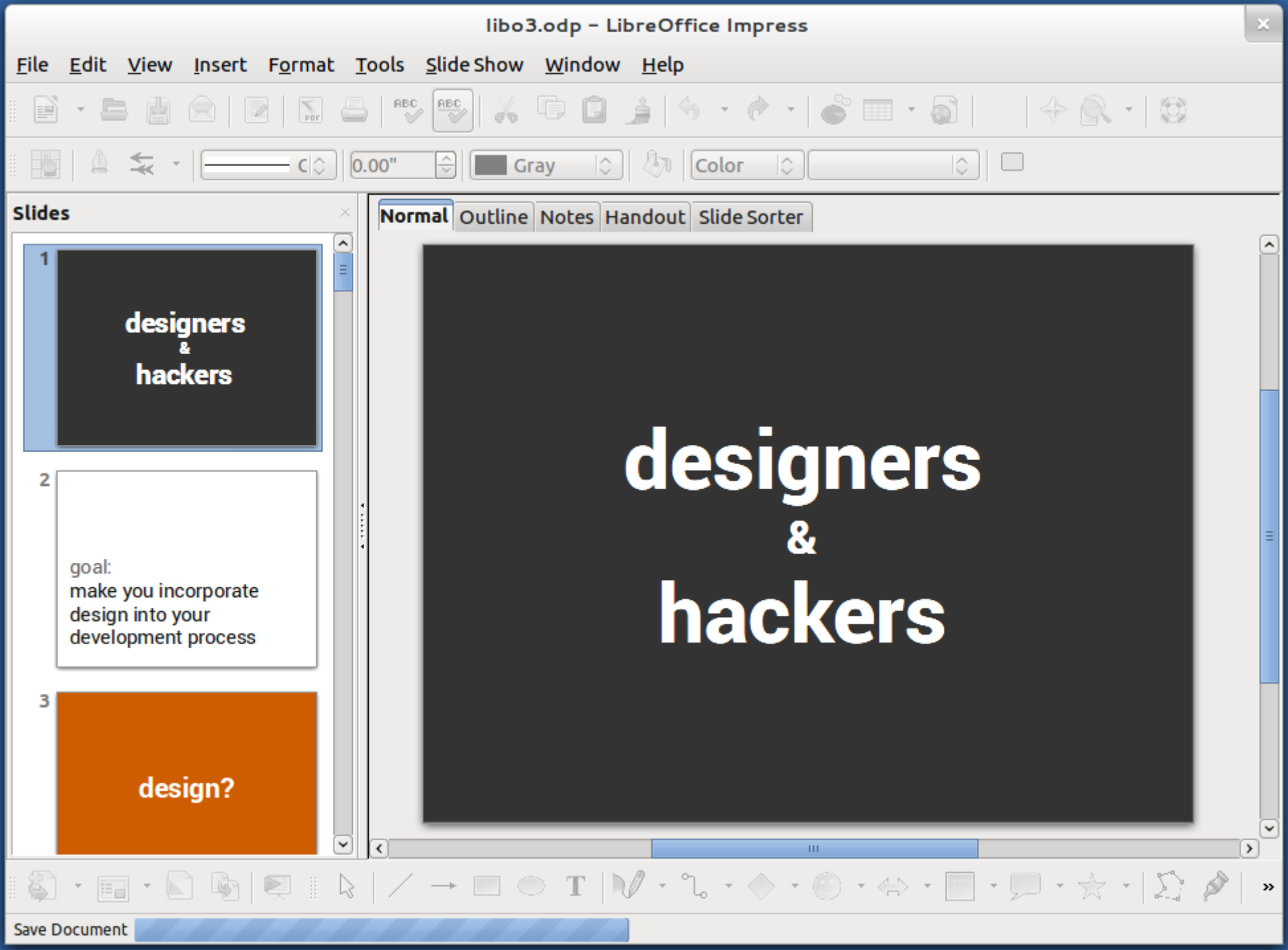
libo3.odp – LibreOffice Impress
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Slides
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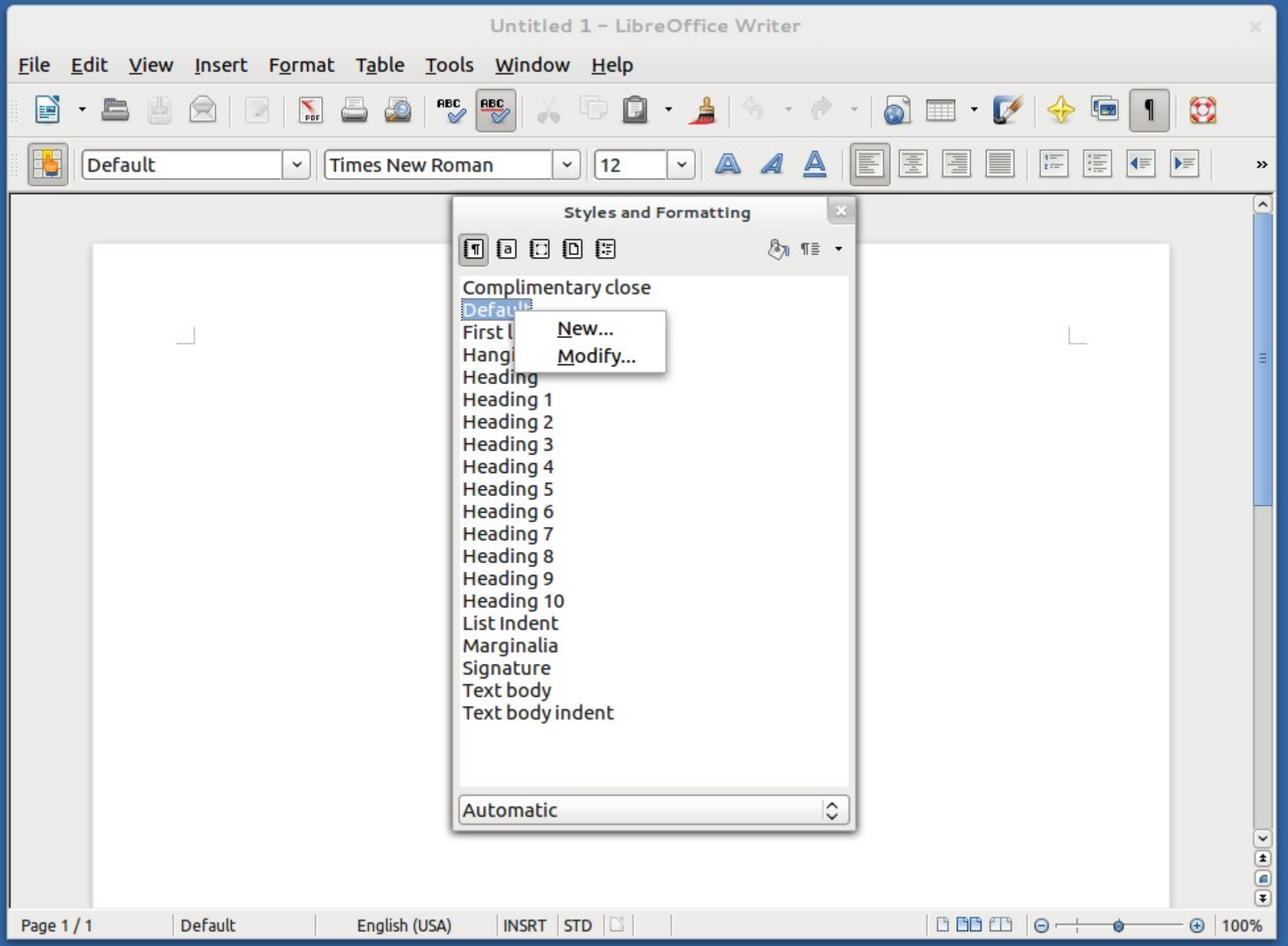
designers
&
hackers
2
goal:
make you incorporate
design into your
development process
3
design?
Normal Outline Notes Handout Slide Sorter
designers
&
hackers
Save Document

ux-discovery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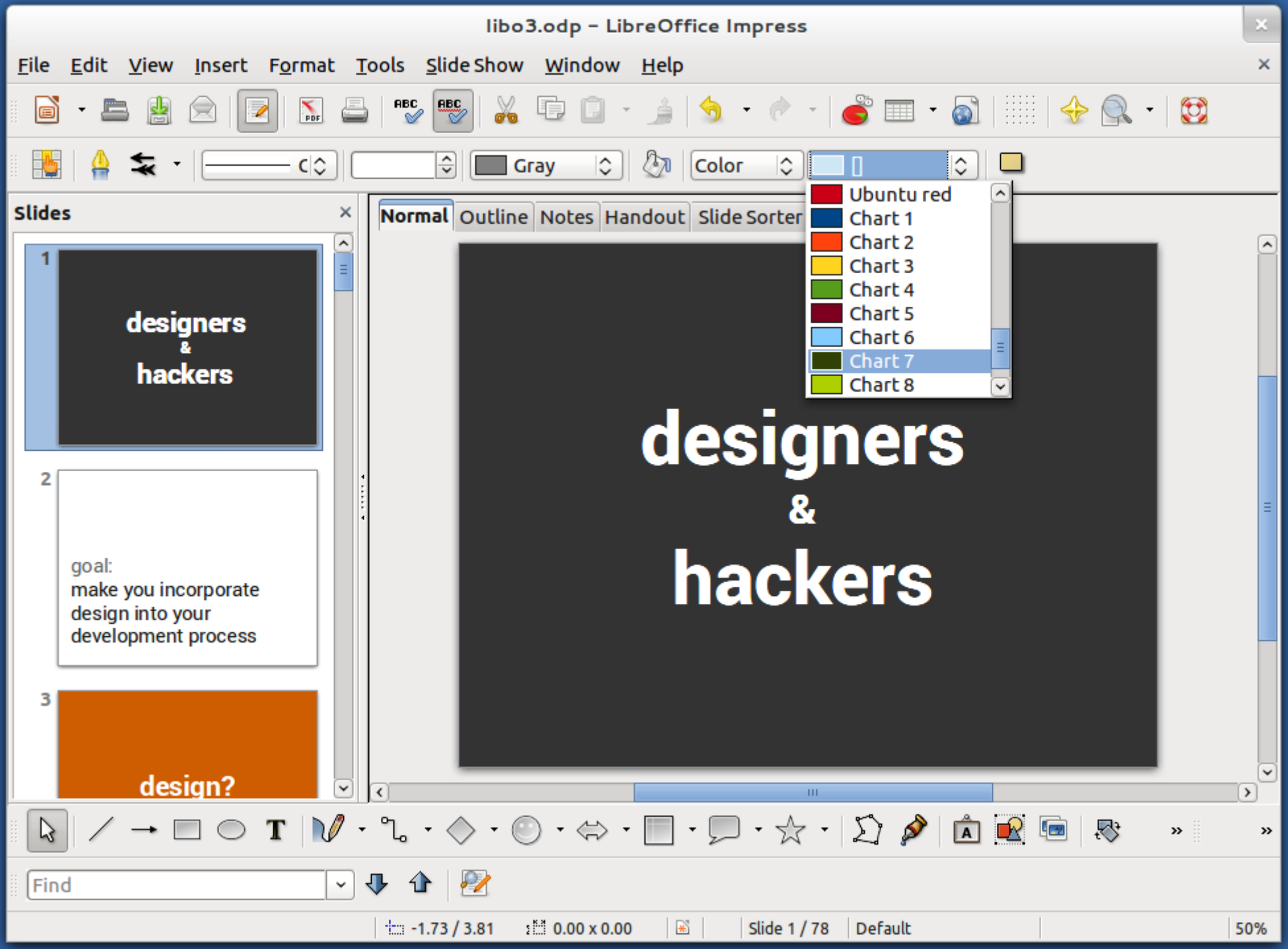
libo3.odp – LibreOffice Impress
File Edit View Insert Format Tools Slide Show Window Help
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Color
Ubuntu red
Chart 1
Chart 2
Chart 3
Chart 4
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Chart 6
Chart 7
Chart 8
Slides
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designers & hackers
2
goal:
make you incorporate design into your development process
3
design?
Normal Outline Notes Handout Slide Sorter
designers & hackers
Find
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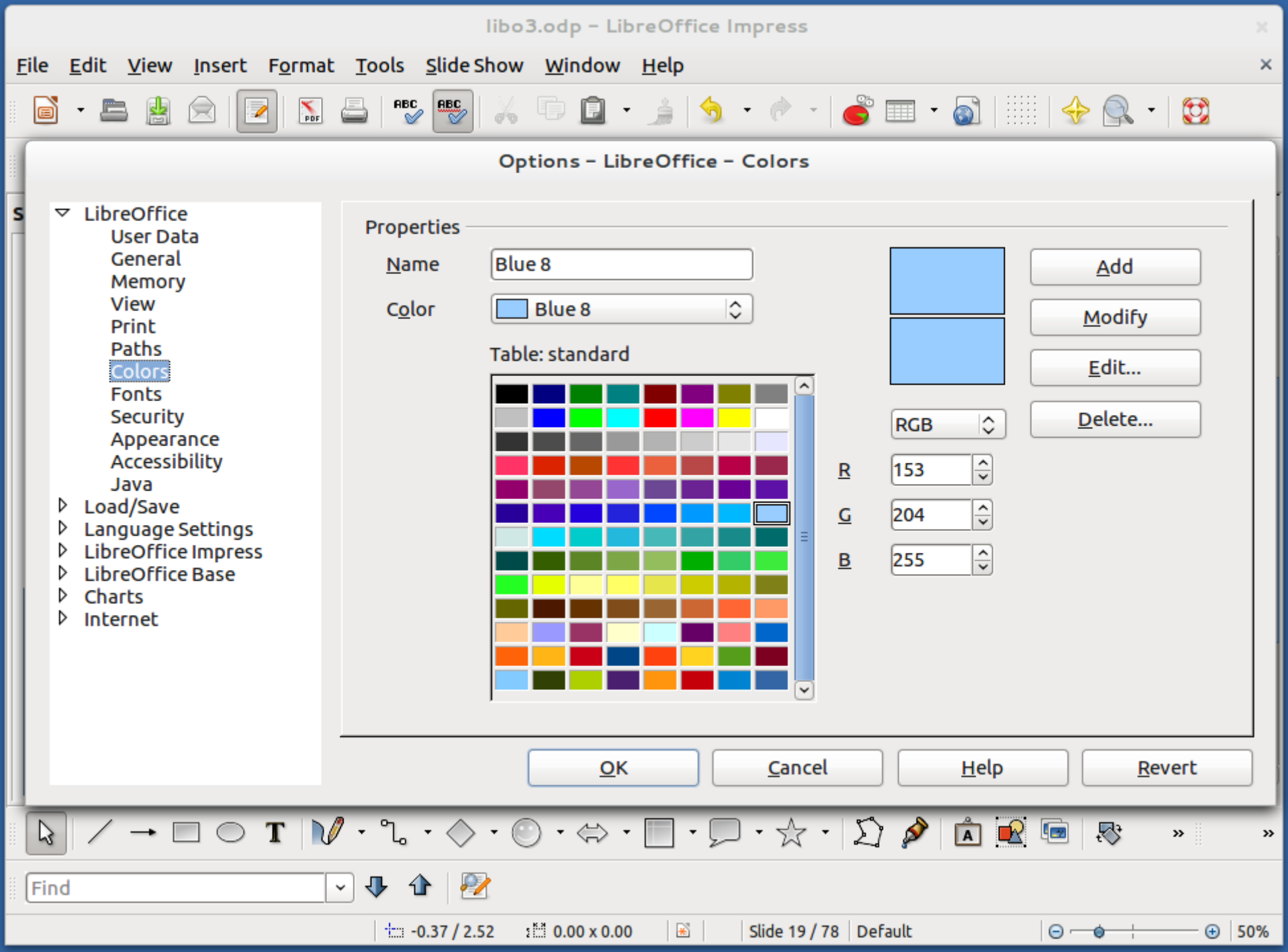
0.00 x 0.00
Slide 1 / 78
Default
50%


libo3.odp – LibreOffice Impress
File Edit View Insert Format Tools Slide Show Window Help
Options – LibreOffice – Colors
LibreOffice
User Data
General
Memory
View
Print
Paths
Colors
Fonts
Security
Appearance
Accessibility
Java
Load/Save
Language Settings
LibreOffice Impress
LibreOffice Base
Charts
Internet
Properties
Name
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Blue 8
Table: standard
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RGB
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OK
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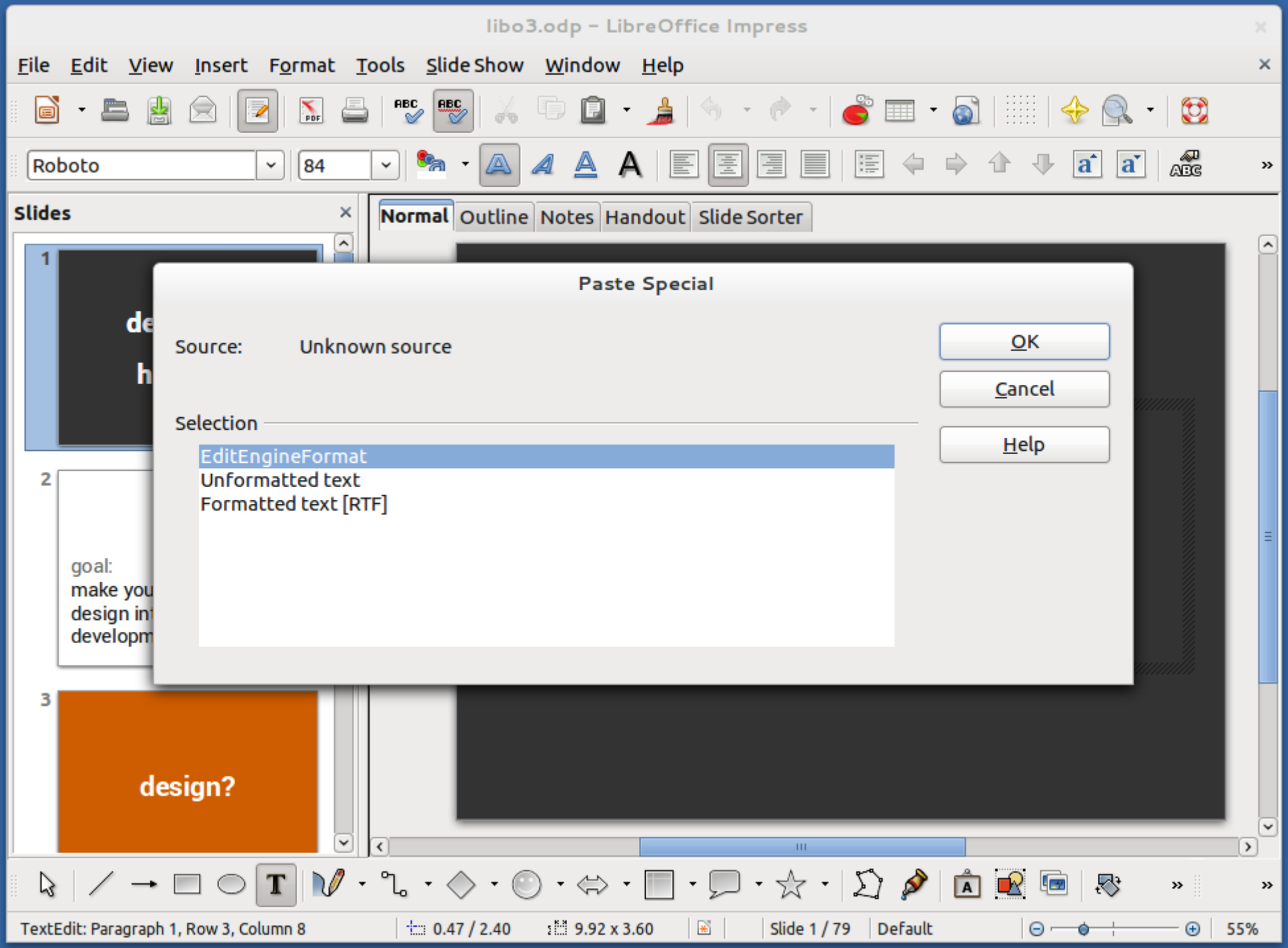
Slide 19 / 78
Default
50%

ux-jargon


libo3.odp – LibreOffice Impress
File Edit View Insert Format Tools Slide Show Window Help
Roboto
84
Slides
Normal Outline Notes Handout Slide Sorter
Paste Special
Source: Unknown source
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goal:
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TextEdit: Paragraph 1, Row 3, Column 8
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9.92 x 3.60
Slide 1 / 79
Default
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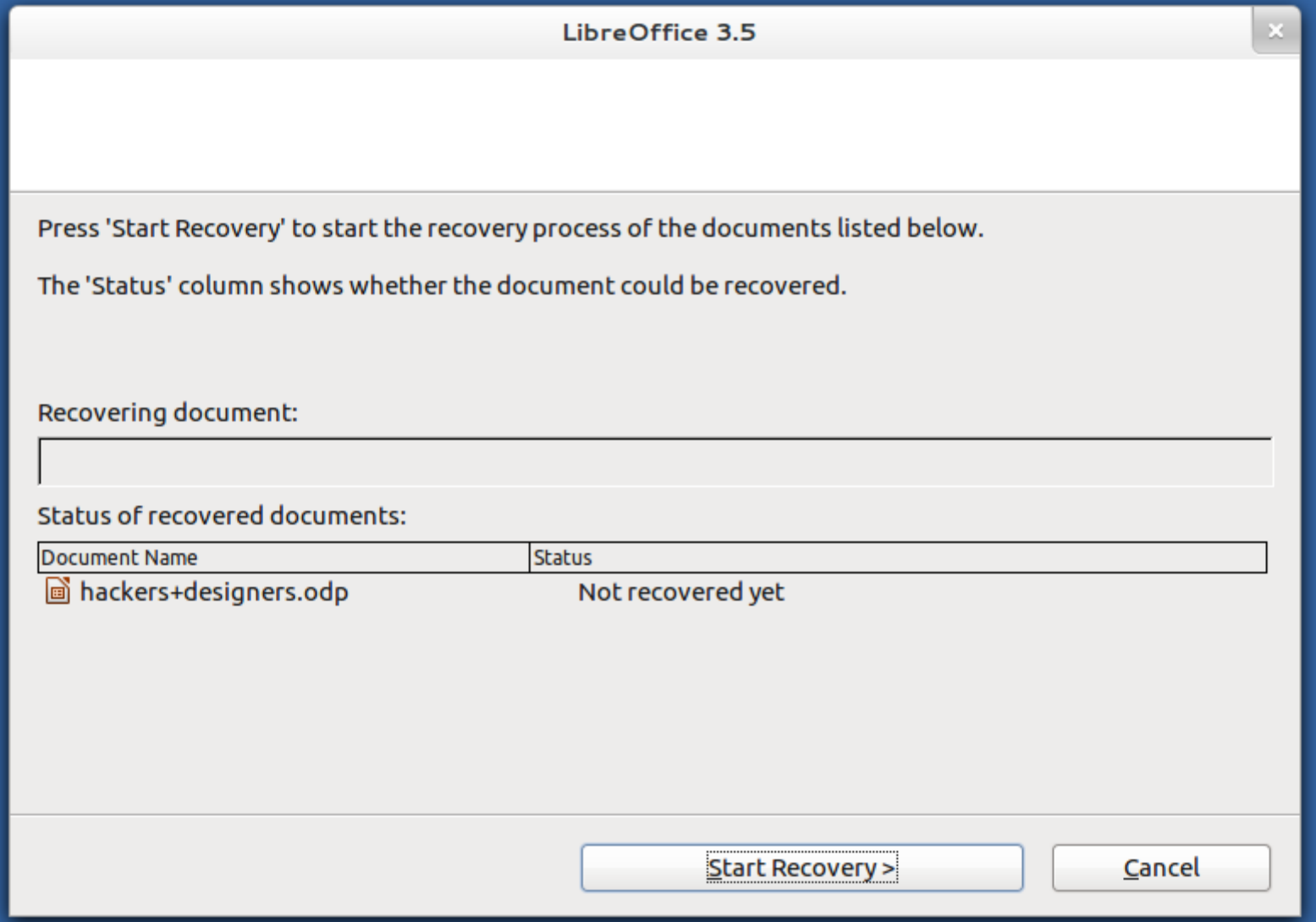
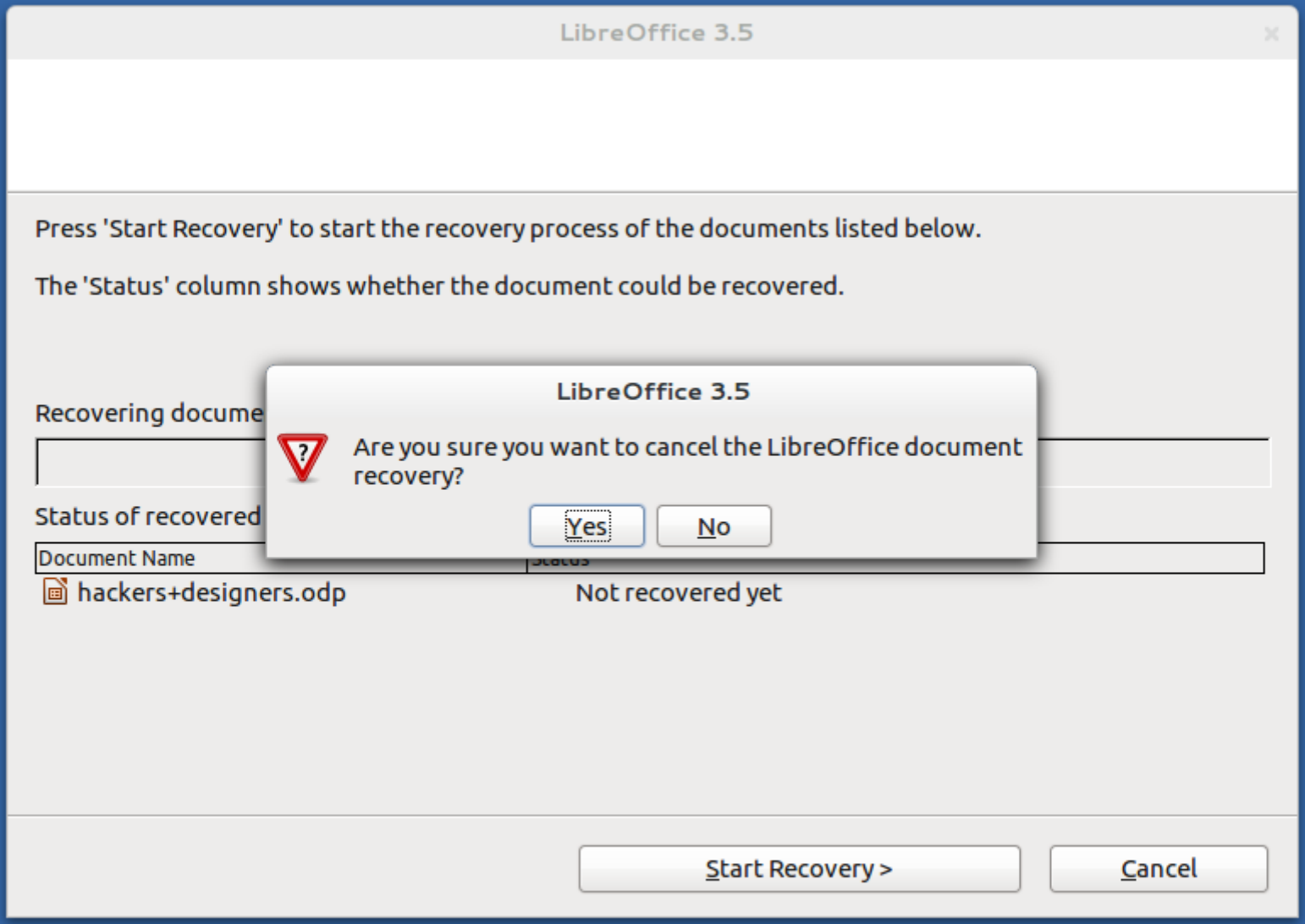
ERRORPROOF

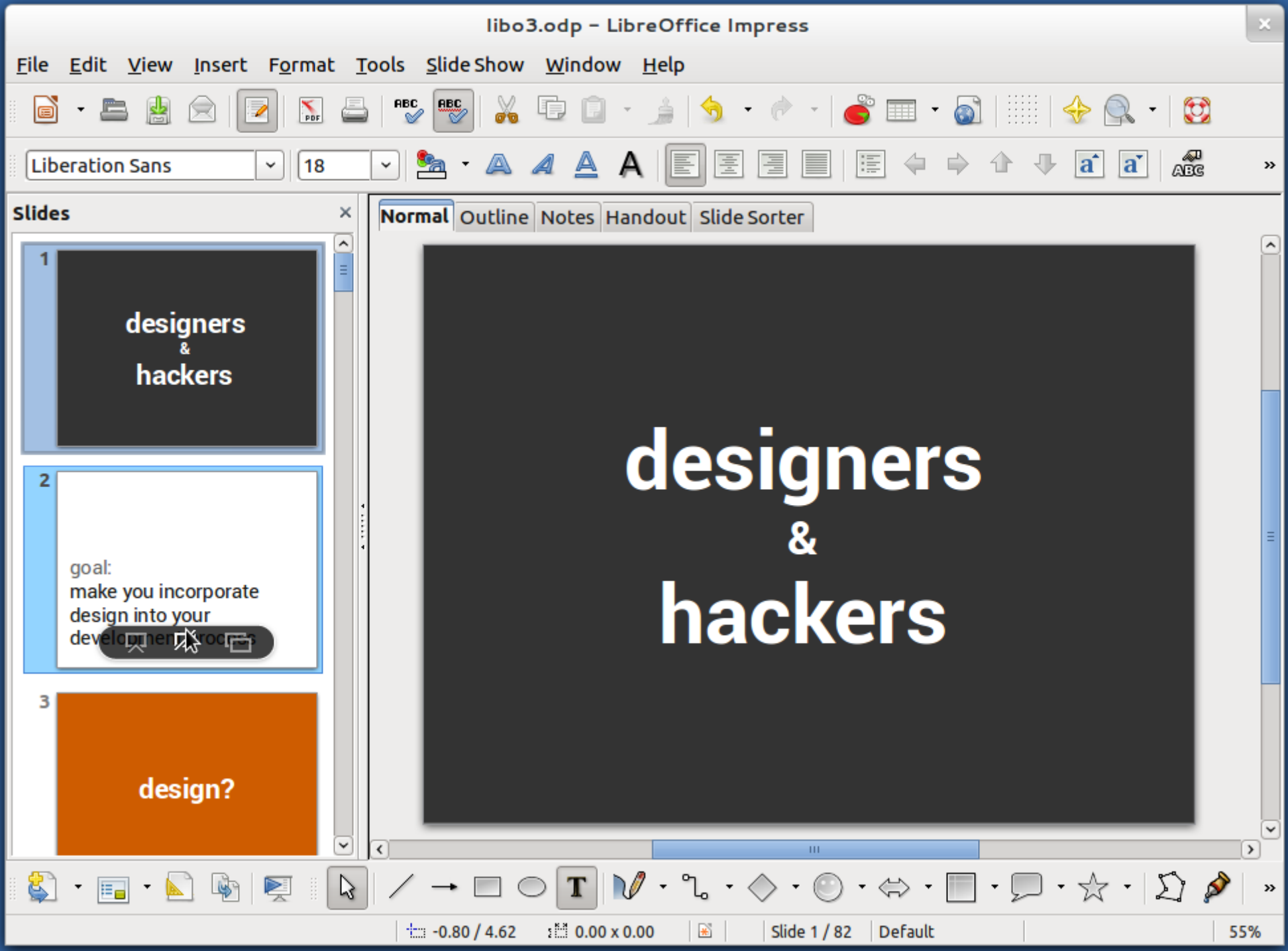
ux-undo

ux-error-recovery


LibreOffice 3.5
Press 'Start Recovery' to start the recovery process of the documents listed below.
The 'Status' column shows whether the document could be recovered.
Recovering document:
Status of recovered documents:
Document Name
Status
hackers+designers.odp
Not recovered yet
Start Recovery >
Cancel


LibreOffice 3.5
Press 'Start Recovery' to start the recovery process of the documents listed below.
The 'Status' column shows whether the document could be recovered.
Recovering docume
Status of recovered
Document Name
hackers+designers.odp
Not recovered yet
Start Recovery >
Cancel
LibreOffice 3.5
Are you sure you want to cancel the LibreOffice document recovery?
Yes
No

ux-error-prevention


libo3.odp – LibreOffice Impress
File Edit View Insert Format Tools Slide Show Window Help
Liberation Sans
18
Slides
1
designers
&
hackers
2
goal:
make you incorporate
design into your
development process
3
design?
Normal Outline Notes Handout Slide Sorter
designers
&
hackers
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Slide 1 / 82
Default
55%

ux-mode-error

CASIO
SCIENTIFIC CALCULATOR
fx-77
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HIGH-POWER
SOLAR CELL
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MODE
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sin
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tan
+/-
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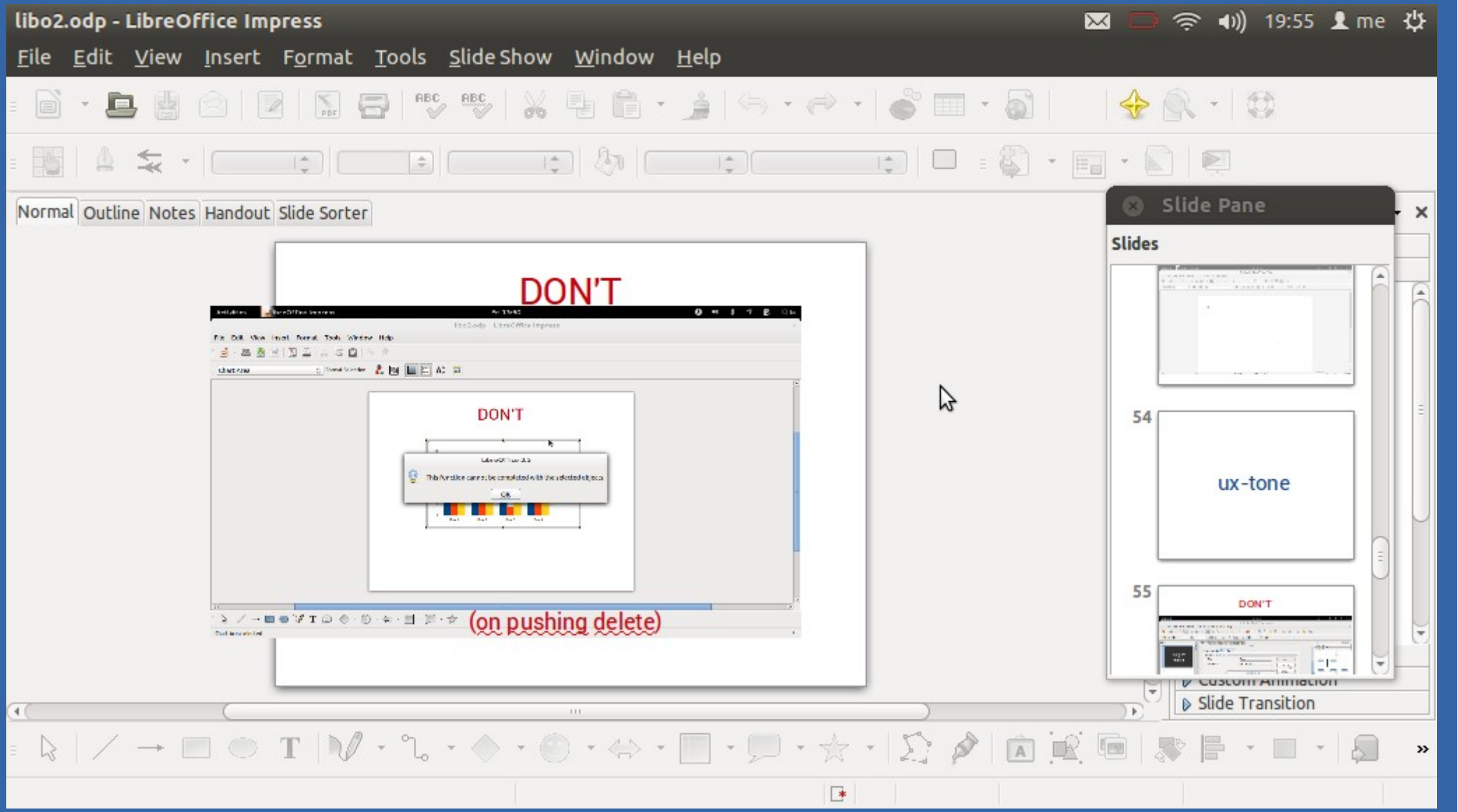
libo2.odp - LibreOffice Impress
19:55 me
File Edit View Insert Format Tools Slide Show Window Help
Normal Outline Notes Handout Slide Sorter
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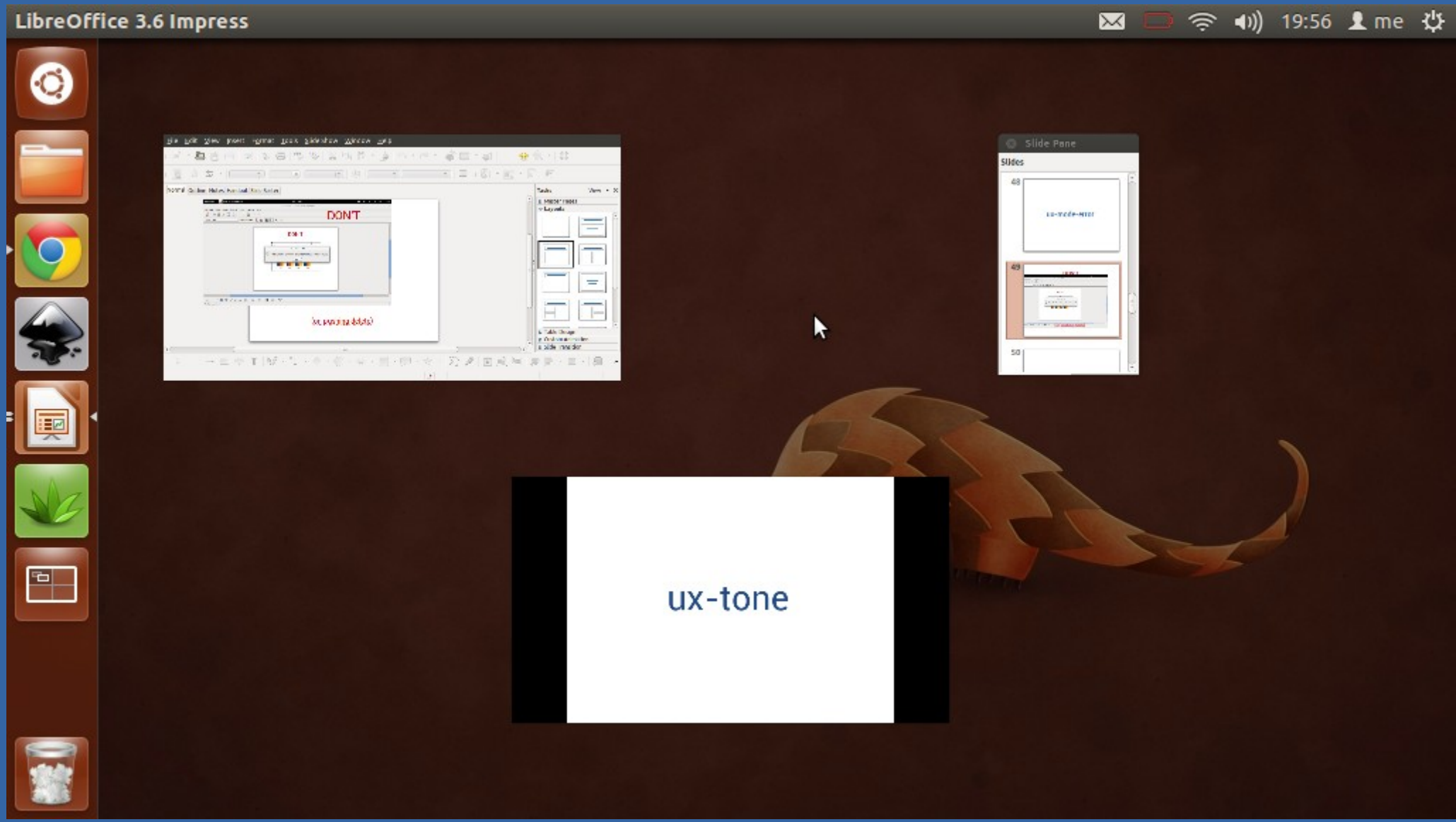
Slide Transition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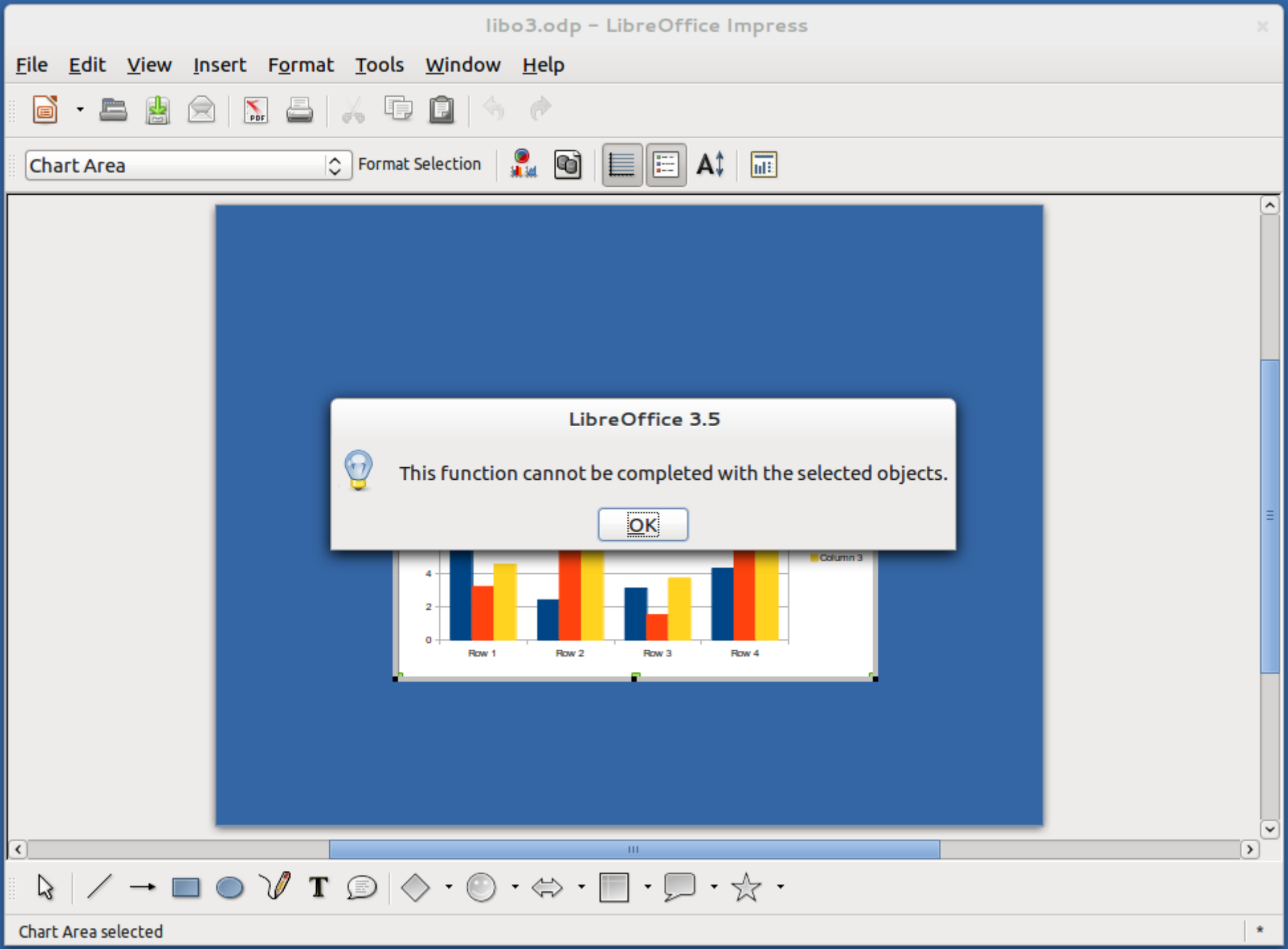
libo3.odp – LibreOffice Impress
File Edit View Insert Format Tools Window Help
Chart Area
Format Selection
LibreOffice 3.5
This function cannot be completed with the selected objects.
OK
Column 3
4
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0
Row 1
Row 2
Row 3
Row 4
Chart Area selected

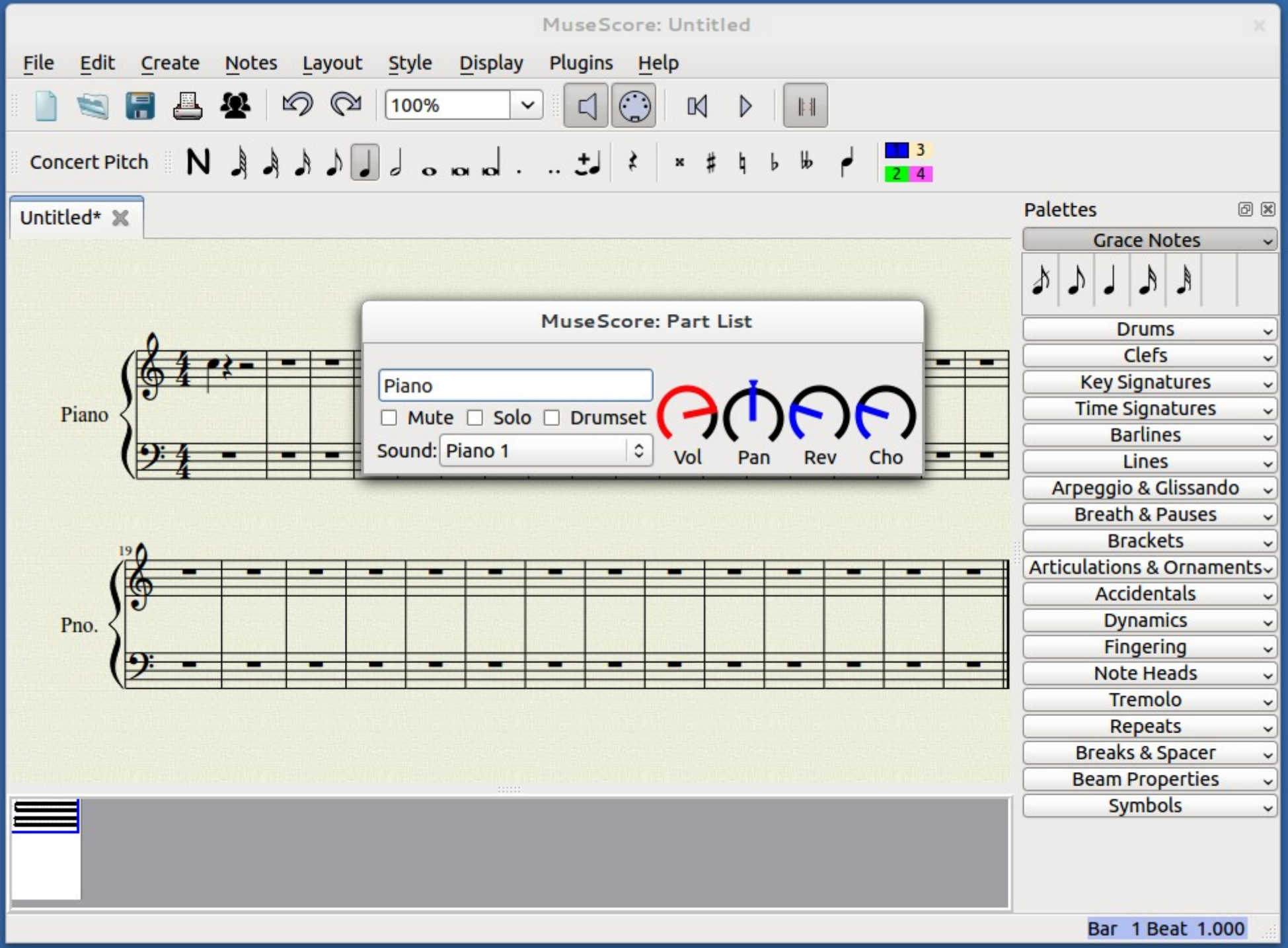
ux-implementation-level

have a good conceptual model

"A good conceptual model allows us to predict the effects of our actions. Without a good model we operate by rote, blindly; we do operations as we were told to do them; we can't fully appreciate why, what effects to expect, or what to do if things go wrong."

– Donald A. Norman,

The Design of Everyday Things


MuseScore: Untitled
File
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Layout
Style
Display
Plugins
Help
100%
Concert Pitch
Untitled*
Palettes
Grace Notes
Drums
Clefs
Key Signatures
Time Signatures
Barlines
Lines
Arpeggio & Glissando
Breath & Pauses
Brackets
Articulations & Ornaments
Accidentals
Dynamics
Fingering
Note Heads
Tremolo
Repeats
Breaks & Spacer
Beam Properties
Symbols
MuseScore: Part List
Piano
Mute
Solo
Drumset
Sound:
Piano 1
Vol
Pan
Rev
Cho
Piano
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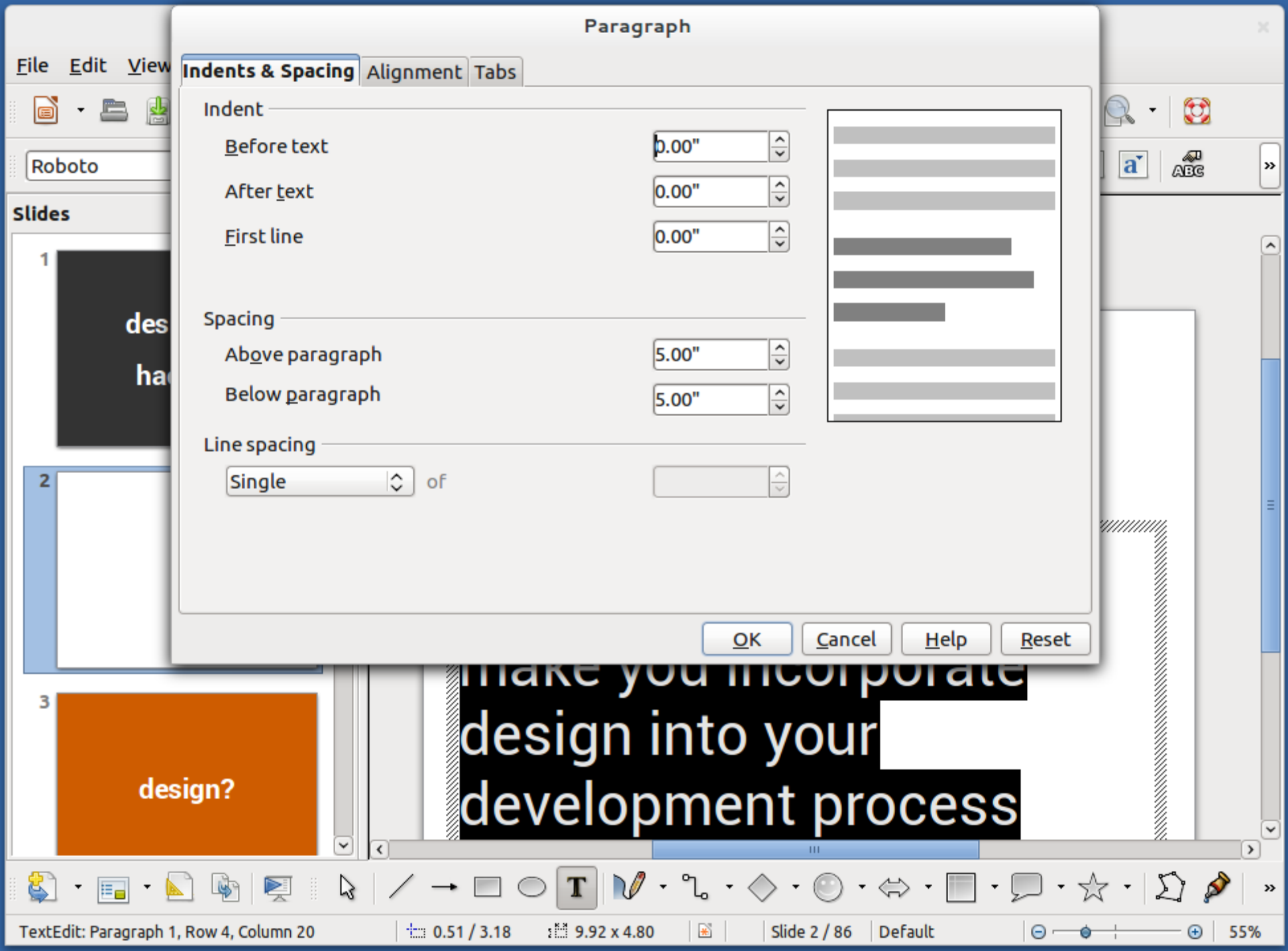
Pno.
Bar 1 Beat 1.000


Paragraph
File
Edit
View
Indents & Spacing
Alignment
Tabs
Indent
Before text
0.00"
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1
2
3
design?
design into your
development process
TextEdit: Paragraph 1, Row 4, Column 20
0.51 / 3.18
9.92 x 4.80
Slide 2 / 86
Default
55%

ux-control

ux-tone

what we do

analyses

whiteboards

playgrounds

user research

Summary

Design a pithy idea workflow.

Status

Call for Proposals	Analyzing Proposals	Shaping Tentative Design	Implementation in Progress	Implemented

Scope

In Scope	Out of Scope
• Easy to browse through • Terse phrases • Space for multiple proposals	• Development tracking

Relevant Bugs

- Bug example

Definition of Terms

- **Whiteboard:** A wiki page for the purpose of developing a design idea into a full-blown specification.
- **Scope:** A list of qualities the final design should have. The scope should be broad enough to restrict proposals as little as possible.
- **Bug:** A software flaw that produces an incorrect or unexpected result.
- **Persona:** A made-up person who represents our common user. The way he uses LibreOffice helps shape the way we design our feature.

Discussion

- LibreOffice Design List

Personas

- **Mr. Persona**: A made-up user that represents the norm we want to design for. He does tasks similar to those of a

Proposals

Proposal by Mirek2

Mockups

Whiteboard in "Read" mode

Whiteboard in "Edit" mode

Description

Read mode

In this mode, the whiteboard can be read by anyone.

Edit mode

In this mode, the whiteboard can be edited in wiki markup by signed-in users.

Proposal by Monica

Mockups

Whiteboard in "Read" mode

Whiteboard in "Edit" mode

Description

Read mode

In this mode, the whiteboard can be read by anyone.

Edit mode

In this mode, the whiteboard can be edited in wiki markup by signed-in users.

Proposal by Monica

Mockups

Space for another designer's proposal

Description

Adding proposals

Each designer should be able to add his proposal under the "Proposals" category.

Relevant Art

- Gnome Whiteboards

Open Problems

Presentation of Slide Notes

In the same view as slide thumbnails	In a separate view
• Allows the user to see the slide as well as the notes that accompany it simultaneously. • Doesn't require a tab bar (useful if we want to use the slide gesture to advance slides)	• Make it possible to present a bigger preview of the slide and more of the notes.

Final decision: In the same view as slide thumbnails

Advancement of Slides

The following are non-exclusive, and we may choose a combination of solutions.

Using on-screen buttons	Using a slide gesture	By tapping on the slide thumbnail or notes
• Allows the use of a tab bar for a slide gesture. • Doesn't have to be explained to the user in advance. • Makes it possible to navigate both back and forward.	• Makes it possible to advance the slide without looking at the screen. • Makes it possible to navigate both back and forward. • Intuitive to touch users, who use the same gestures for moving between photos.	• Familiar to desktop users

Final decision: Using a slide gesture

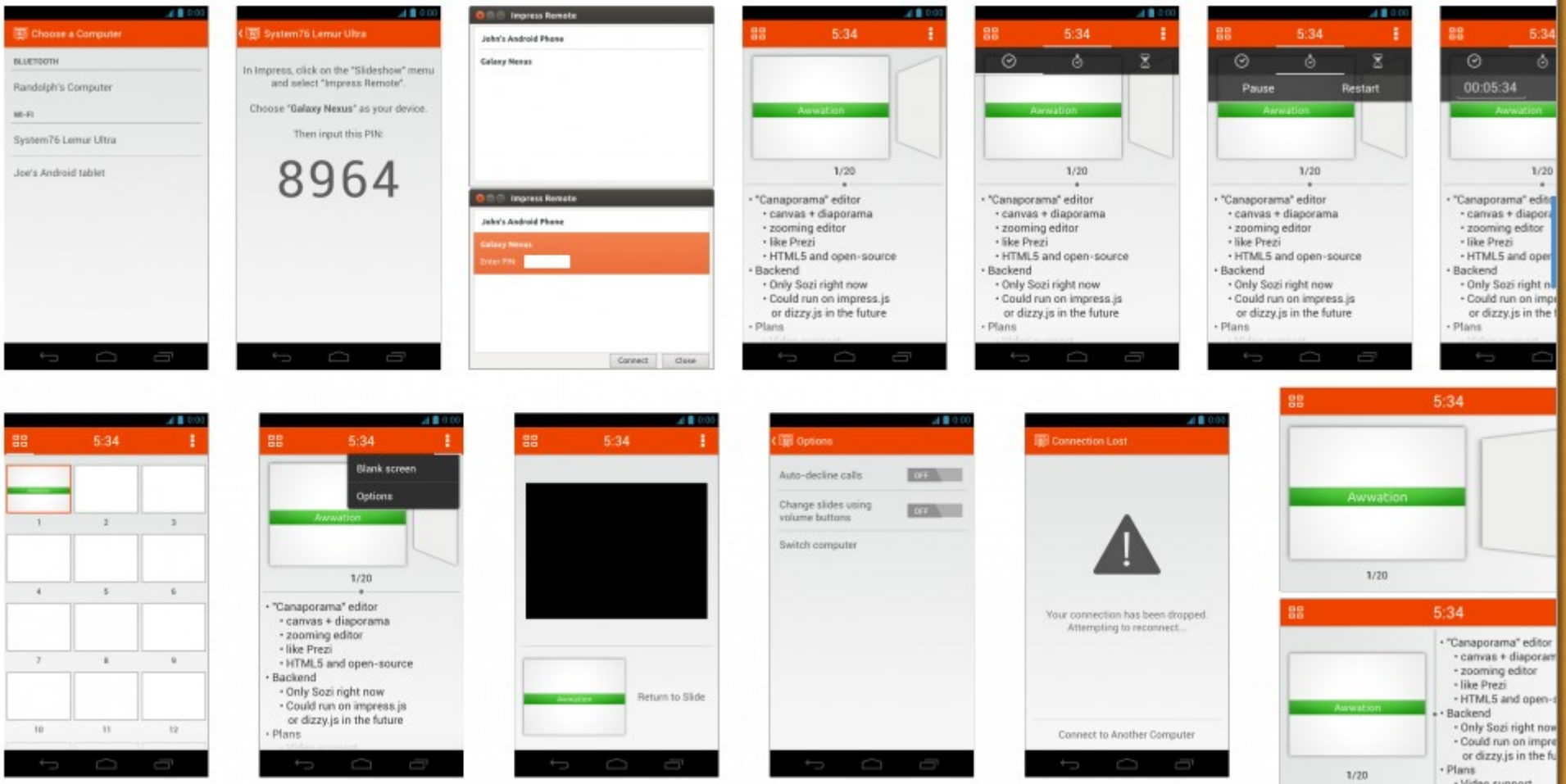
Portrait vs. Landscape Mode

Show the same info	Use different views
• Consistent	• Fast view change • Presenter doesn't have to look at the screen to change

wiki.documentfoundation.org

http://wiki.documentfoundation.org/Design/Whiteboards/Impress_remote#Tentative_Design

Tentative Design



Connecting to a computer

If the connection was forcefully disconnected (Via the modal bar) after the last time the remote was used one should need to enter a new PIN. Otherwise the app should try to reconnect using the last settings. Same goes for the PC.

The first screen the app shows is the one to select computers that the cell can connect to via wlan or bluetooth. Then the user can generate a PIN on the phone and enter it on the PC. Those set-up screens can be reached via the

find us or join us

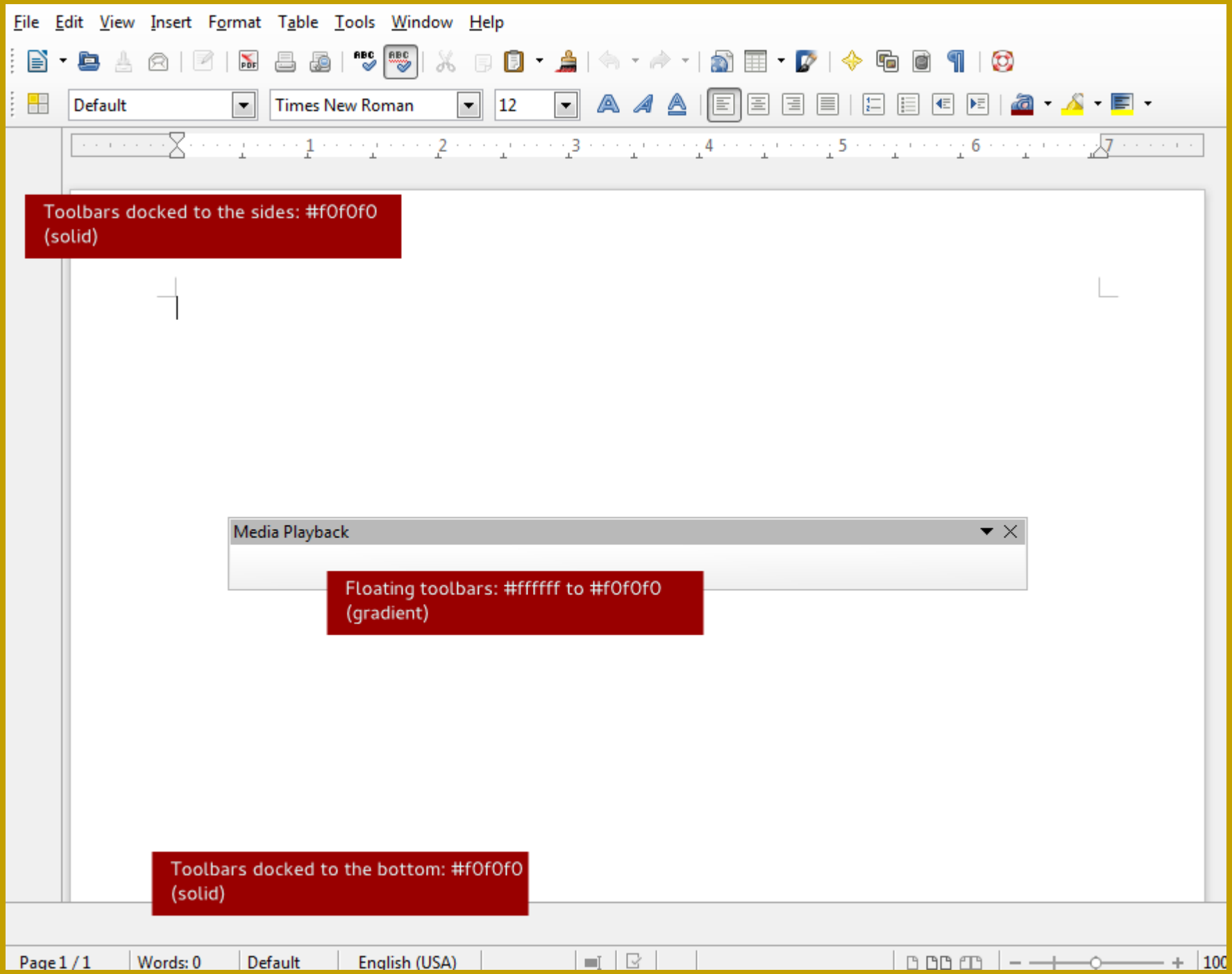
WIKI Design

GOOGLE+ LibreOffice Design

E-MAIL libreoffice-ux-advise
@lists.freedesktop.org

FREENODE #libreoffice-design
Saturday, 16:00 UTC

libreoffice-ux-advise
@lists.freedesktop.org


File Edit View Insert Format Table Tools Window Help
Default
Times New Roman
12
Toolbars docked to the sides: #f0f0f0 (solid)
Media Playback
Floating toolbars: #ffffff to #f0f0f0 (gradient)
Toolbars docked to the bottom: #f0f0f0 (solid)
Page 1 / 1
Words: 0
Default
English (USA)

DESIGNERS <=> HACKERS