

Unified Text Layout Engine for FOSS Systems

SijiSunny
siji@melabs.in

Background of GNOME Live 2006

Topic And Observation

Fundamental Problems

**Improper understanding of text handling
architecture leads to non unified text layout
engine**



Text handling Architecture



Latin One character one glyph

Three layer Architecture

Backup store layer

Glyph Layer

I/O Layer

d35 d2f d4d d15 d4d d15 d4b d32 d4d
ൠ യ ് ക ് ക േ റ ി ്

വയോൽ

d35 d2f d4d d15 ~~d4d~~ d15 d4b d32 d4d

d35 d2f d4d d15

വയ

വയ്ക്ക

d15 d4b d32 d4d

കോൽ

വയ്ക്ക കോൽ

47 4f 4f 44

GOOD

GOOD

47 4f ~~4f~~ 44

47 4f

GO

GO

44

D

GOD

Editing Complex Script

d35 d2f d4d d15 d4d d15 d4b d32 d4d
 റ യ ് ക ് ക ൊ റ ്

വയോൽ

d35 d2f d4d d15 ~~d4d~~ d15 d4b d32 d4d

d35

വ

വ

d2f d4d d15 d15 d4b d32 d4d

യുകോൽ

വയുകോൽ

47 4f 4f 44

GOOD

GOOD

47 4f 4f 44

47 4f

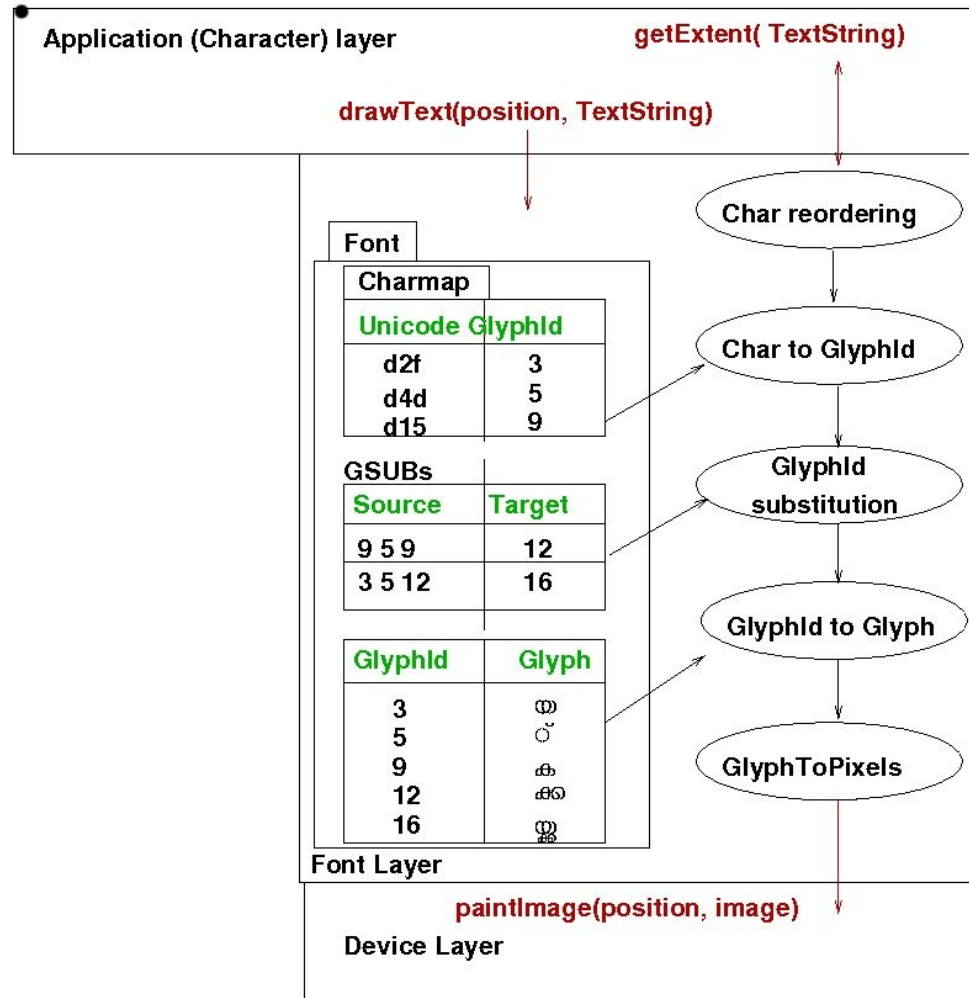
GO

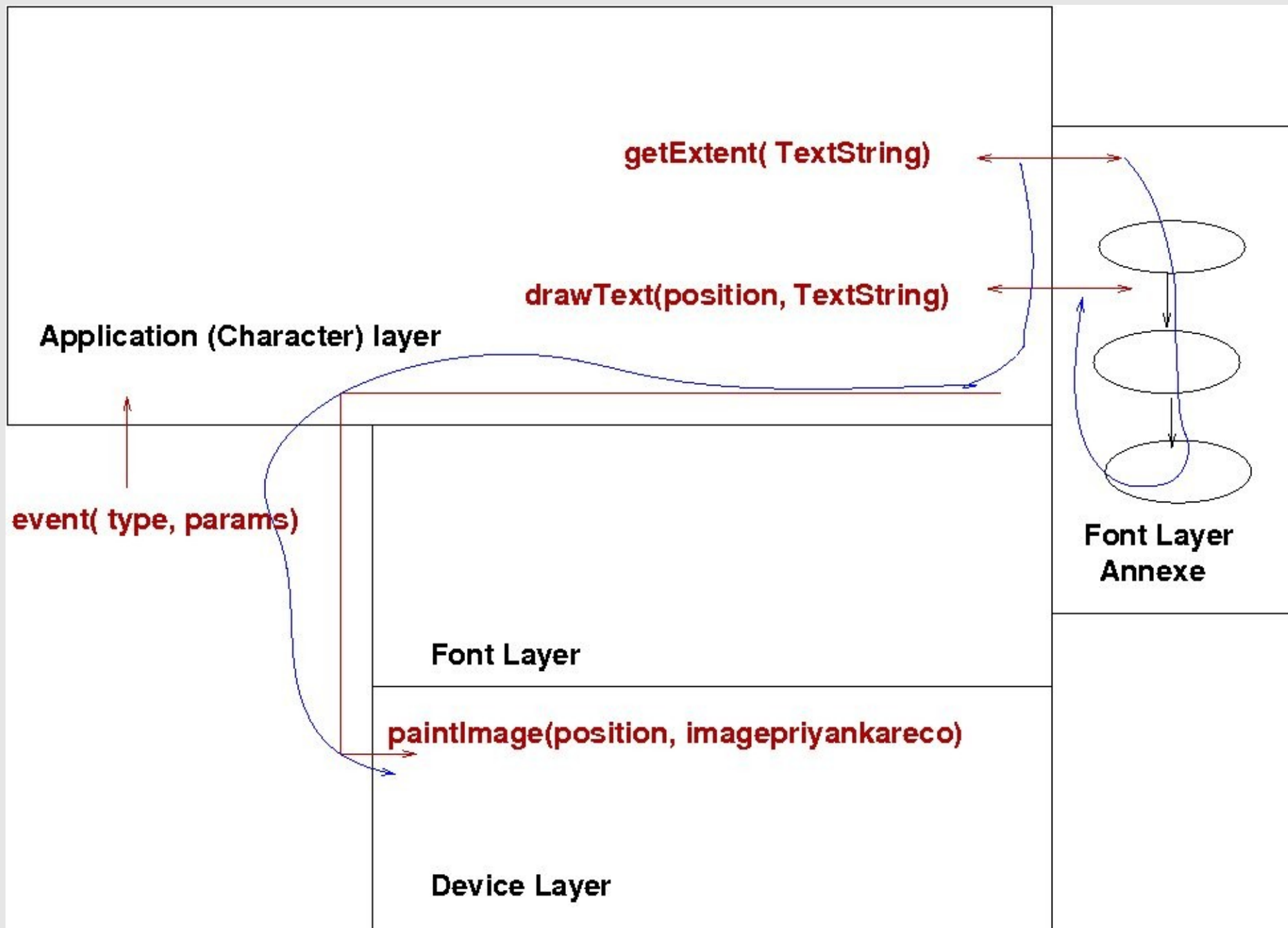
GO

44

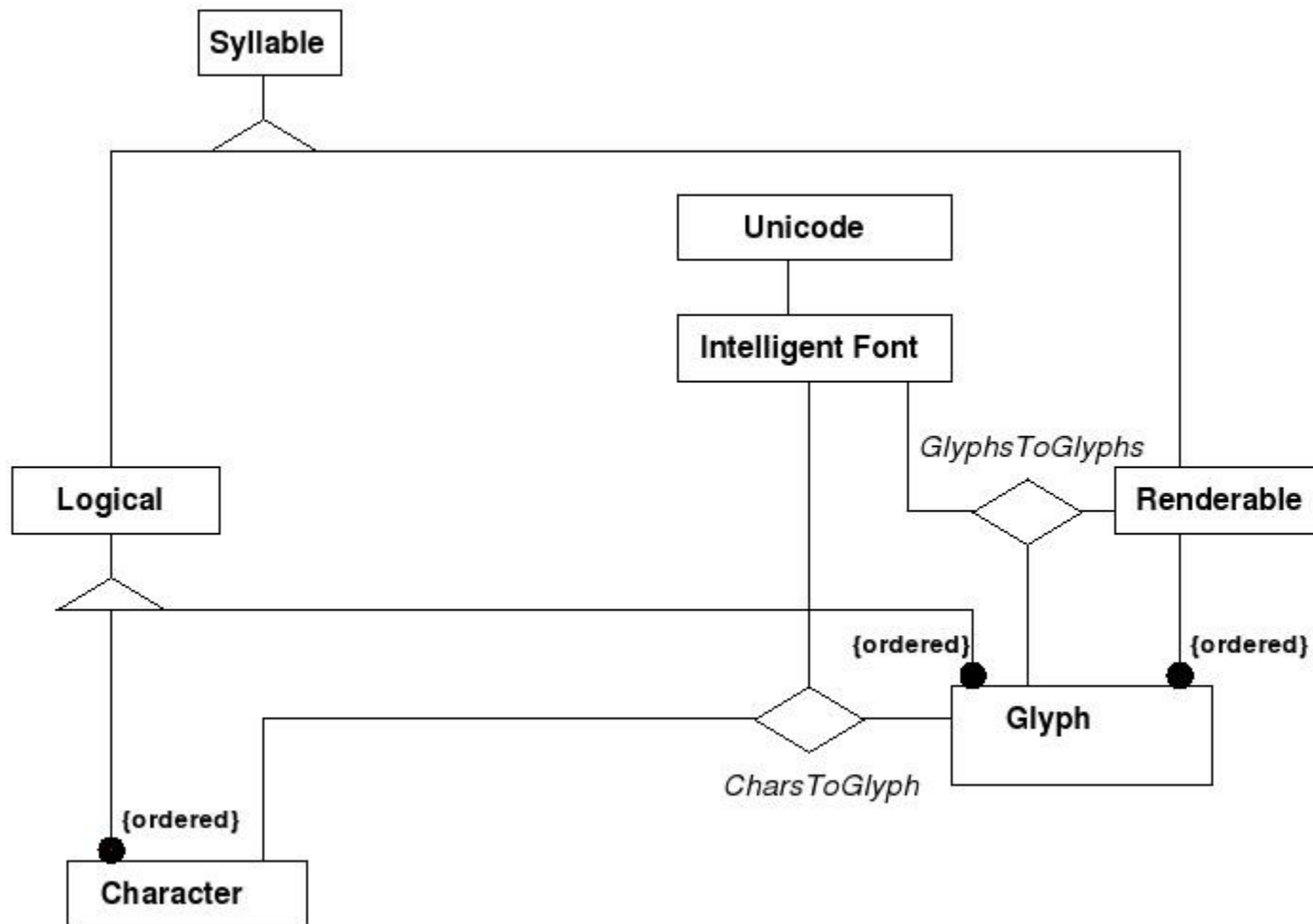
D

GOD

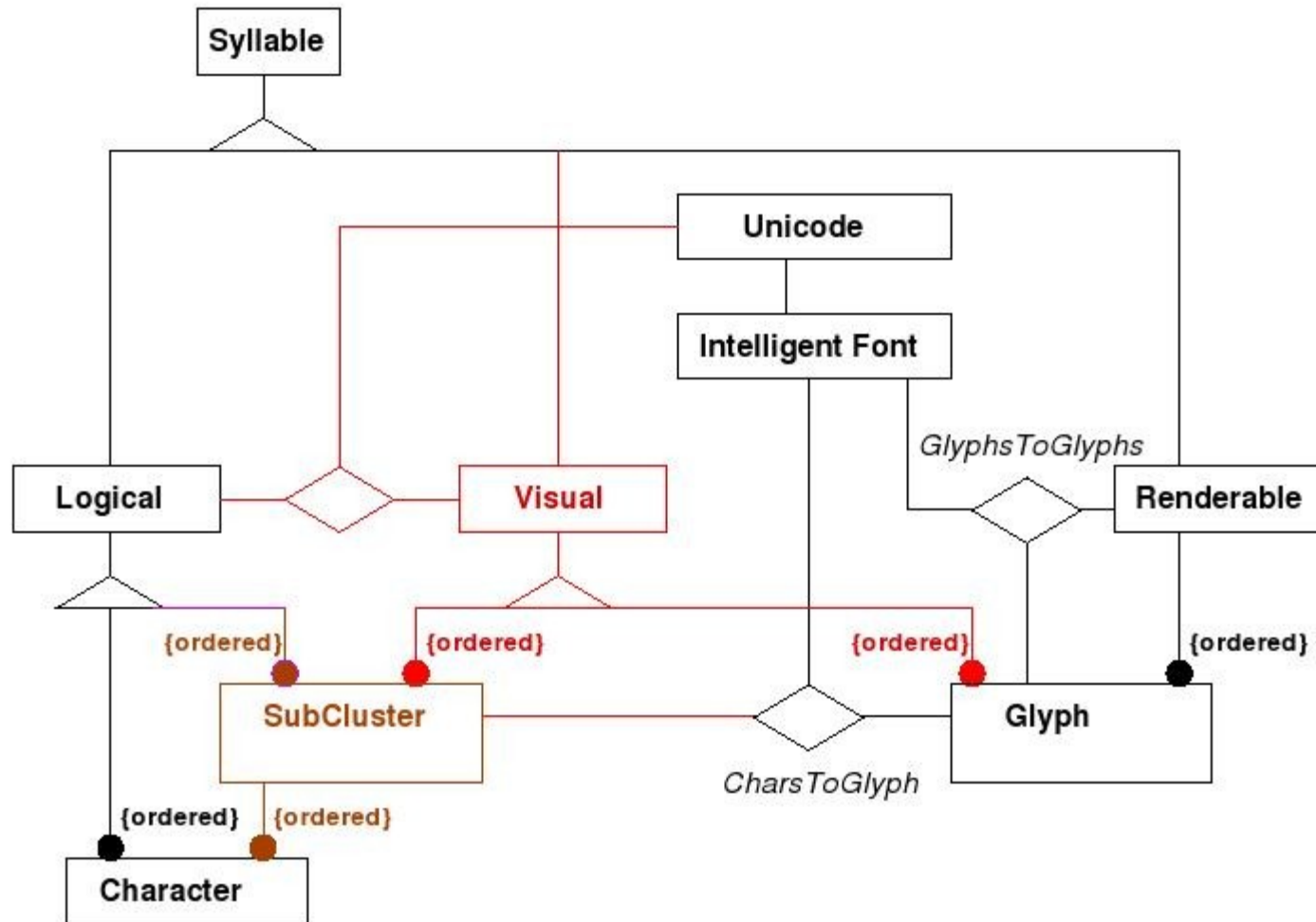




Characters to Glyphs object model



Characters to Glyphs object model for Indic





Thank You

Siji Sunny, MELabs

Twitter : siji_sunny

Gtalk : sijisunny