📝 SimpleDocTemplate

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The `SimpleDocTemplate` class in ReportLab's Platypus module is used to create PDF documents with a straightforward layout. It provides several parameters to customize the document's appearance and behavior. Here's a comprehensive list of the parameters you can use when initializing a `SimpleDocTemplate`:

📝 SimpleDocTemplate Parameters

📄 Document Settings

01. filename

    The name of the PDF file to be created.

02. pagesize

    Defines the size of the pages (letter, A4)

03. pageTemplates

    A list of `PageTemplate` instances to define complex page layouts.

04. showBoundary

    If set to a non-zero value, draws a boundary around the frame for debugging purposes.

📐 Margins (in points; 1 inch = 72 points)

05. leftMargin

    Left margin of the page.

06. rightMargin

    Right margin of the page.

07. topMargin

    Top margin of the page.

08. bottomMargin

    Bottom margin of the page.

🔧 Layout and Flow Control

09. allowSplitting

    If set to 1 (default), allows flowables (like paragraphs)
    to split across pages.

🖋 Metadata

10. title

    Title of the document.

11. author

    Author of the document.

12. subject

    Subject of the document.

13. keywords

    Keywords associated with the document.

14. creator

    The software that created the document.

15. producer

    The software that produced the PDF.

🔒 Security and Compression

16. invariant

    If set to 1, produces PDFs that are byte-identical across runs.

17. pageCompression

    If set to 1 (default), compresses pages in the PDF.

18. encrypt

    An instance of reportlab.lib.pdfencrypt.StandardEncryption to encrypt the PDF.

🖼️ Additional Settings

19. cropMarks

    If set to 1, adds crop marks to the pages.

20. rotation

Rotates the page content by the specified degrees.

Format

```
SimpleDocTemplate(
                    filename,
                    pagesize = letter,
                    pageTemplates = None,
                    showBoundary = 0,
                    leftMargin = 72,
                    rightMargin = 72,
                    topMargin = 72,
                    bottomMargin = 72,
                    allowSplitting = 1,
                    title = None,
                    author = None,
                    subject = None,
                    keywords = None,
                    creator = None,
                    producer = None,
                    invariant = 0,
                    pageCompression = 1,
                    encrypt = None,
                    cropMarks = None,
                    rotation = 0
)
```

🎨 Example: Creating a Styled PDF with `SimpleDocTemplate`

```
from reportlab.lib.pagesizes import letter
from reportlab.platypus import SimpleDocTemplate, Paragraph, Spacer,
Table, TableStyle
from reportlab.lib.styles import getSampleStyleSheet, ParagraphStyle
from reportlab.lib import colors
from reportlab.lib.enums import TA_CENTER, TA_JUSTIFY
from reportlab.lib.units import inch

# Create a PDF document with 1-inch margins
doc = SimpleDocTemplate(
    "StyledDocument.pdf",
    pagesize=letter,
    leftMargin=1 * inch,
    rightMargin=1 * inch,
    topMargin=1 * inch,
    bottomMargin=1 * inch,
    title="Styled PDF Document",
    author="Shahzada Moon"
)

# Define styles
styles = getSampleStyleSheet()
styles.add(ParagraphStyle(name='CenterTitle', alignment=TA_CENTER,
fontSize=16, leading=20, textColor=colors.darkblue))
styles.add(ParagraphStyle(name='Justify', alignment=TA_JUSTIFY))

# Build the story
story = []

# Add a title
story.append(Paragraph("ReportLab Styled PDF Example",
styles['CenterTitle']))
story.append(Spacer(1, 12))
```

```
# Add a paragraph
text = """Hello, it's me 'Shahzada Moon'! This is a multiline paragraph that will automatically wrap to the next line when it reaches the end of the page. This ensures that all text is visible and properly formatted."""
story.append(Paragraph(text, styles['Justify']))
story.append(Spacer(1, 12))

# Add a table
data = [
    ['Name', 'Age', 'Country'],
    ['Alice', '28', 'USA'],
    ['Bob', '32', 'Canada'],
    ['Charlie', '24', 'UK']
]
table = Table(data, colWidths=[2 * inch] * 3)
table.setStyle(TableStyle([
    ('BACKGROUND', (0, 0), (-1, 0), colors.lightblue),
    ('TEXTCOLOR', (0, 0), (-1, 0), colors.whitesmoke),
    ('ALIGN', (0, 0), (-1, -1), 'CENTER'),
    ('FONTNAME', (0, 0), (-1, 0), 'Helvetica-Bold'),
    ('BOTTOMPADDING', (0, 0), (-1, 0), 12),
    ('BACKGROUND', (0, 1), (-1, -1), colors.beige),
    ('GRID', (0, 0), (-1, -1), 1, colors.black),
]))
story.append(table)

# Build the PDF
doc.build(story)
```

****

Complete

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