

MASTERING SENDING TEMPLATE-BASED EMAILS IN ORACLE APEX

JACKIE MCILROY
JACKIE@UNITED-CODES.COM - @MCILROYJACKIE

DIMITRI GIELIS
DGIELIS@UNITED-CODES.COM - @DGIELIS
DGIELIS.COM

UNITED CODES - @UNITED_CODES - UNITED-CODES.COM





www.united-codes.com



APEX Office Print



APEX Media Extension



APEX Project Eye



Plug-ins Pro



APEX Office Edit





I want to remind the
team a few days
before a game.



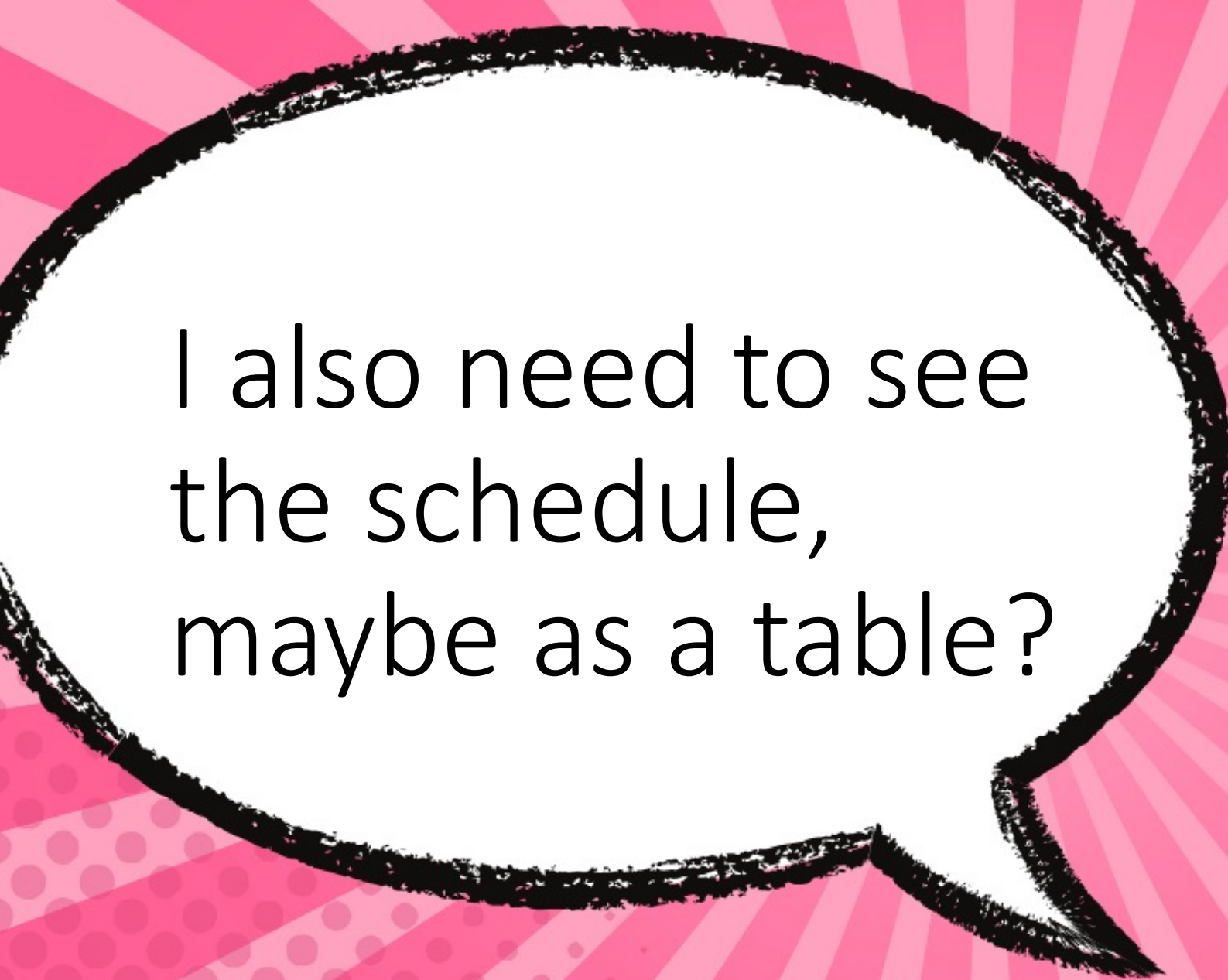
I can do that!
Let me show you...



I want to add the
logo and maybe
attachments to the
email



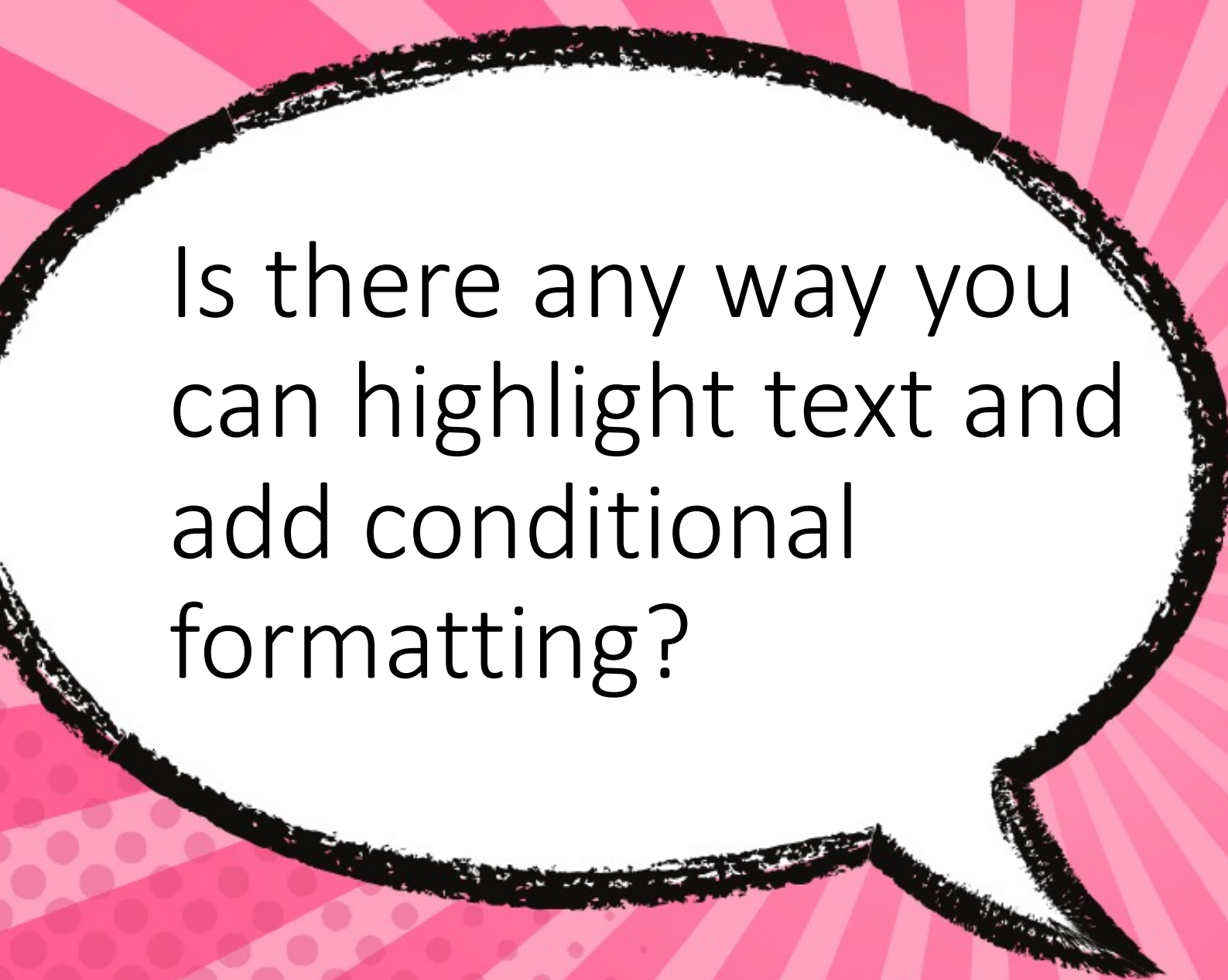
I can do that!
Let me show you...



I also need to see
the schedule,
maybe as a table?



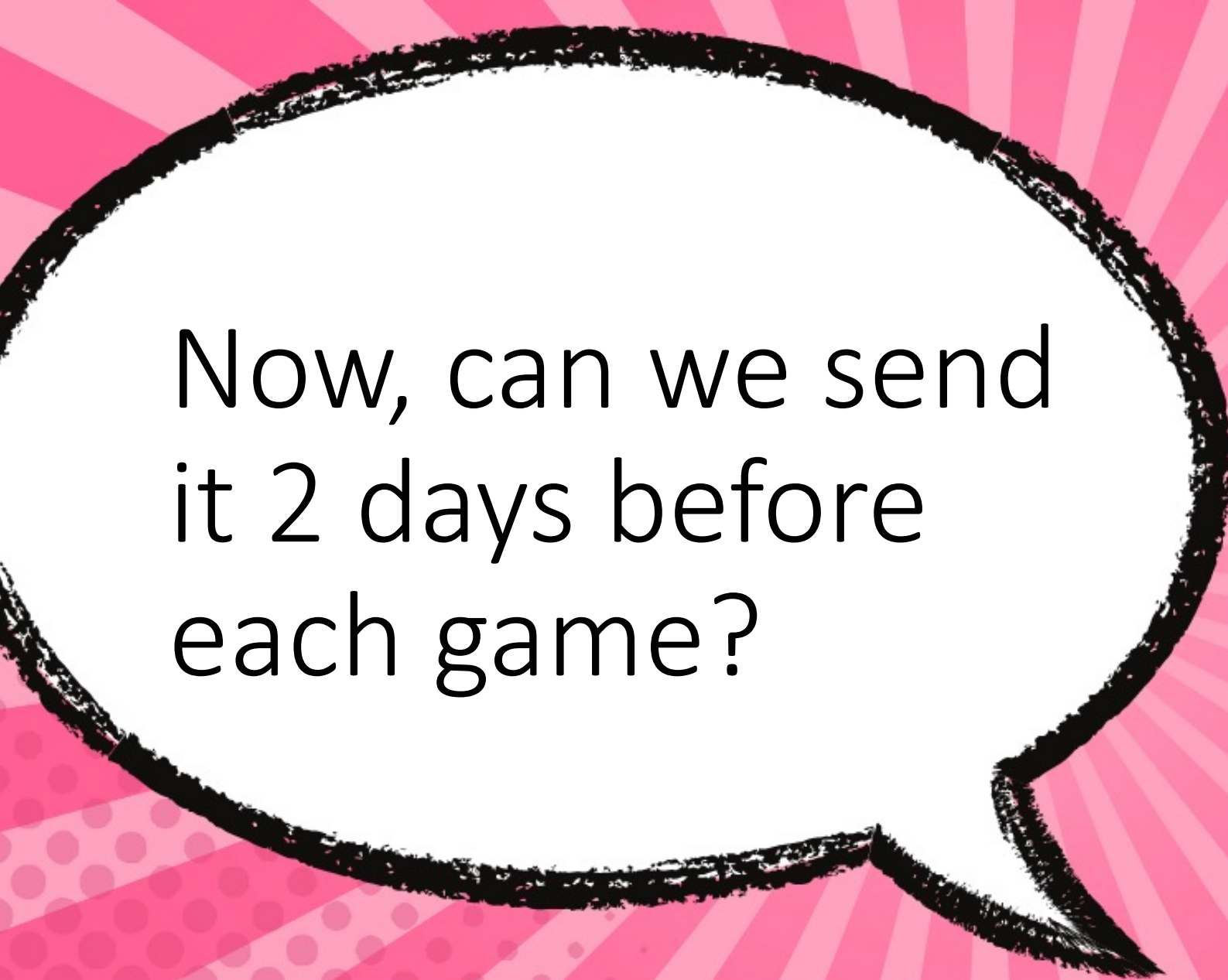
I can do that!
Let me show you...



Is there any way you
can highlight text and
add conditional
formatting?



I can do that!
Let me show you...



Now, can we send
it 2 days before
each game?

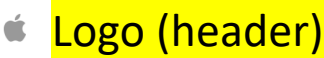


I can do that!
Let me show you...



Can we use the team
colors to make the
emails prettier?

From
To



Informatie en trackinggegevens voor uw zending.

Bestelnummer: [W1186161672](#)
Besteld op: 19/10/2022

Te verzenden artikelen

Verzonden: Wordt op 21/10/2022 geleverd via Expreslevering

Volg zending

Link to site

Handtekening vereist

	Apple Pencil (2e generatie)
	Aantal 1
	Smart Folio voor 12,9-inch iPad Pro (6e generatie) - Zwart
	Aantal 1

Afleveradres:

Dimitri Gielis
.....97
APEX R&D
Kapeldreef 60
3001 Leuven
Belgium

Berichten over verzending:

dgielis@apexrnd.be

Referentienr. levering:

[1318769560](#)

Customer info

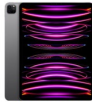
Table with
ordered products

Ook verzenden naar dit adres

Verzending wordt voorbereid:

Wordt op: 26/10/2022 geleverd via Expreslevering

[Bekijk de volledige gegevens van de bestelling](#) >



12,9-inch iPad Pro, Wi-Fi, 512 GB, spacegrijs

Aantal 1

In case of extra
delivery

Product(s)

Vragen

Wat gebeurt er als ik mijn zending niet in ontvangst kan nemen?

Als je niet kunt tekenen voor ontvangst, laat de bezorger een briefje achter. Daarnaast brengt Apple je via e-mail op de hoogte. Je kunt dan rechtstreeks contact opnemen met de vervoerder om een nieuwe bezorgafpraak te maken of een ander bezorgadres op te geven.

Raadpleeg de [onlinehelp](#) voor meer informatie over de bezorgopties van Apple.

Hoe kan ik mijn levering volgen?

Extra text

Voor de meest recente informatie over uw bestelling kunt u 24 uur per dag en zeven dagen per week terecht op de [bestelstatuspagina](#). Hier kunt u de gegevens van uw bestelling bekijken, zoals de gegevens van de vervoerder en informatie waarmee u de levering kunt volgen.

U kunt ook bellen met de klantenservice van de Apple Store op 0800-99846 (laag tarief, bereikbaar van maandag tot en met vrijdag tussen 09:00 en 19:00 uur).

Kan ik mijn bestelling annuleren en mijn geld terugkrijgen?

Als u van gedachten verandert, kunt u tot 14 dagen na ontvangst van het product of de producten uw bestelling annuleren. U krijgt dan het volledige aankoopbedrag terug. U kunt een retourzending aanvragen via telefoonnummer 0800-99846 (laag tarief) of via de [bestelstatuspagina](#). Hiervoor gelden mogelijk uitzonderingen. Raadpleeg voor meer [informatie de verkoopvoorwaarden](#).

Winkel online

Zoek een Store

0800-99846

Download de Apple Store-app

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Footer



I can do that!
Let me show you...



Can I change how
the emails look
whenever I want?



You can do that!
Let me show you...



How can I monitor
the emails?



Let me show you...



Let's look at what
you've learned...

Sending emails in Oracle APEX

- Native **Send E-Mail** Page Process (declarative)
- **APEX_MAIL** PL/SQL package (programmatic)

Process Layout Page Search

Filter ↩

Identification

Name New

Type Send E-Mail

Editable Region - Select -

Settings

From &APP_EMAIL.

To

Cc

Bcc

Reply To

Email Template - Select -

Subject

Body Plain Text

Body HTML

Attachment SQL

Send Immediately ☐

APEX_MAIL PL/SQL API

ADD_ATTACHMENT Procedure Signature 1

ADD_ATTACHMENT Procedure Signature 2

GET_IMAGES_URL Function

GET_INSTANCE_URL Function

PREPARE_TEMPLATE Procedure

PUSH_QUEUE Procedure

SEND Function Signature 1

SEND Function Signature 2

SEND Procedure Signature 1

SEND Procedure Signature 2

APEX_MAIL.SEND Sign. 1 (manual plain/HTML)

```
APEX_MAIL.SEND (  
    p_from          IN VARCHAR2,  
    p_to            IN VARCHAR2,  
    p_cc            IN VARCHAR2 DEFAULT NULL,  
    p_bcc           IN VARCHAR2 DEFAULT NULL,  
    p_replyto       IN VARCHAR2,  
    p_subj          IN VARCHAR2 DEFAULT NULL,  
    p_body           IN [ VARCHAR2 | CLOB ],  
    p_body_html     IN [ VARCHAR2 | CLOB ] DEFAULT NULL  
) RETURN NUMBER;
```

APEX_MAIL.SEND Sign. 2 (template based)

```
APEX_MAIL.SEND (  
    p_from          IN VARCHAR2 DEFAULT NULL,  
    p_to            IN VARCHAR2,  
    p_cc            IN VARCHAR2 DEFAULT NULL,  
    p_bcc           IN VARCHAR2 DEFAULT NULL,  
    p_replyto       IN VARCHAR2 DEFAULT NULL,  
    p_template_static_id IN VARCHAR2,  
    p_placeholders   IN CLOB,  
    p_application_id IN NUMBER      DEFAULT apex_application.g_flow_id,  
    p_language_override IN VARCHAR2 DEFAULT NULL  
) RETURN NUMBER;
```



Creating Email templates

Shared Components > Email Templates

 **APEX** **App Builder** ▾ SQL Workshop ▾ Team Development ▾ Gallery

Search 

↑ Application 690 \ Shared Components \ **Email Templates** 

Email Templates Utilization History

Name ↑ ▾	Subject	Supports Template Directives	Comments	Updated by	Updated	Static Identifier
01 Sample	Order 01 (#ORDER_NUMBER#) Confirmed!	Yes	-	DIMI	25 minutes ago	SAMPLE
02 Sample with Image	Order 02 (#ORDER_NUMBER#) Confirmed!	Yes	-	DIMI	25 minutes ago	SAMPLE_WITH_IMAGE
03 Sample with Tabular data	Order 03 (#ORDER_NUMBER#) Confirmed!	Yes	-	DIMI	25 minutes ago	SAMPLE_WITH_TABULAR_DATA
04 Sample with Template Directives	Order 04 (#ORDER_NUMBER#) Confirmed!	Yes	-	DIMI	24 minutes ago	SAMPLE_WITH_TEMPLATE_DIRECTIVES
05 Sample with Link	Order 05 (#ORDER_NUMBER#) Confirmed!	Yes	-	DIMI	22 minutes ago	SAMPLE_WITH_LINK
06 Custom HTML	Order 06 (#ORDER_NUMBER#) Confirmed!	Yes	-	DIMI	22 minutes ago	CUSTOM_HTML

1 - 6

Template Details

Show All Identification HTML Format Plain Text Format Comments Sample API Usage

Identification

*

Template Name

01 Sample

*

Static Identifier

SAMPLE

?

*

Email Subject

Order 01 (#ORDER_NUMBER#) Confirmed!

?

Supports Template Directives

Yes

?

HTML Format

Header ?

↶ ↷ 🔍

1 <b style="font-size: 24px;">My Application

* Body ?

↶ ↷ 🔍

1 Hello #CUSTOMER_NAME#,

2

3 Thank you for placing your order!

4

5 Order Details

6

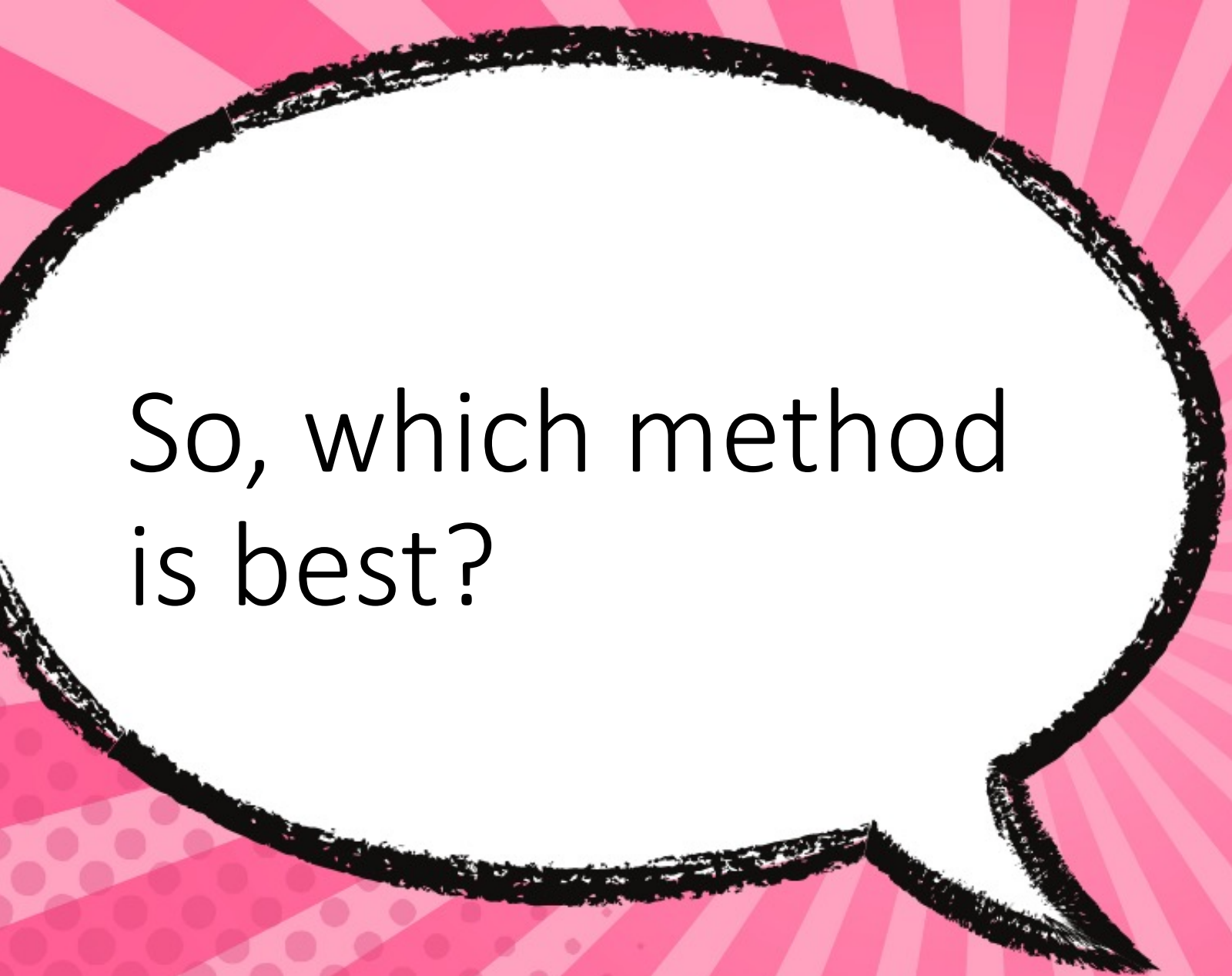
7 <table width="100%">
8 <tr>
9 <td colspan="1">Order Details</td></tr>

Footer ?

↶ ↷ 🔍

1 Visit My Application and manage your email preferences.

Template details



So, which method
is best?

Pros & Cons of Native Send E-Mail Process

Pros

- Simple and declarative to setup
- Match placeholders with items or values

Cons

- No way to dynamically select a template
- Body limited to 4K
- Placeholder Values limited to Item or Value

Pros & Cons of APEX_MAIL PL/SQL API

Pros

- Programmatic approach (bulk emails, lookup info, ...)
- Full possibilities
- Ability to schedule

Cons

- Maintain code

Pros & Cons of Native Email templates

Pros

- Out-of-the box template
- Support for template directives
- Integration in APEX app (exports with app)

Cons

- HTML Template has 32K limit
- Template directives limited (if, case, loop)
- Developer has to update the template

Pros & Cons of Custom Email templates

Pros

- Use any HTML template (download, create. ...)
- Full flexibility in generating HTML

Cons

- Have to write and maintain logic yourself
- No Template directives, but can use PL/SQL logic
- Need to know HTML and email formats (what works and don't?)

You need more?

With APEX Office Print (AOP) :

- Business user can create and update templates
- HTML template can be stored in table as CLOB (>32K)
- AOP templating engine is very powerful
- Data is dynamically merged with the HTML template
- AOP can be called from an APEX Plug-in or PL/SQL
- AOP can include APEX components (IR, IG, Classic, JET Chart, ...)
- AOP reports can be scheduled



Twitter: @dgielis
Email: dgielis@united-codes.com
Blog: dgielis.com

www.united-codes.com

Twitter: @McilroyJackie
Email: jackie@united-codes.com
Blog: jackiemcilroy.blogspot.com