# Modular Android Applications

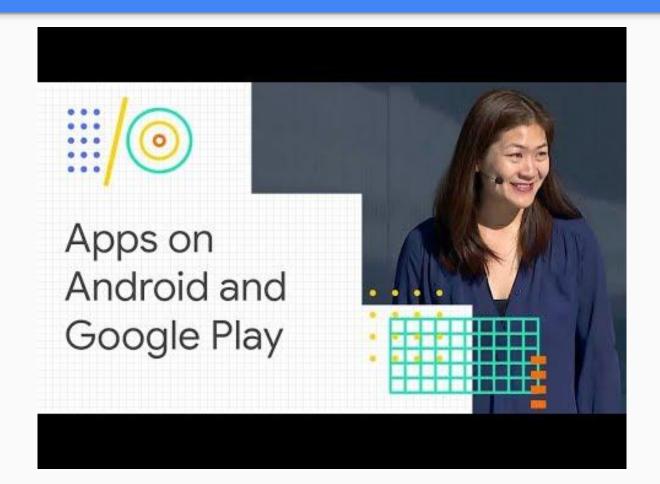
Thuy

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#### Modular, Instant, Dynamic

- For the past 10 years, we have developed applications by adding everything under the :app module
- The future of Android application development is:
  - Modularity via App Bundle enables you to deliver leaner, fresher with optional features loaded on-demand
  - Instant App
  - Dynamic Feature

### Modular, Instant, Dynamic



## Modular, Instant, Dynamic







#### Achievements and progress

Apply these new features to the Android Braive application:

- 1. Config App Bundle
- 2. Add Dynamic Feature
- 3. Add empty Instant app

#### App Bundle Build

- Simple Setup
  - update build tools and Android Studio
  - upload sign to playstore
- No refactor required
- Can select which module to include upon build

(i) APK size: 5.6 MB, Download Size: 5.4 MB	
File	Raw File Size
▶ <b>b</b> base	5.3 MB
► META-INF	75 KB
<b>▶</b> dynamic_feature	7.8 KB
▶ <b>d</b> ynamic_feature2	1.1 KB
	<i></i>

#### Dynamic Feature

- Support for App bundle is a prerequisite
- Separates module to allow user to download modules on-demand

#### Dynamic Feature

- Setup
  - Update dependencies, disable shrinks
  - add others depend module, update proper build variant
- Requires com.google.android.play.core to communicate with play store:
  - Communicate with others module such as sharing data, dependencies
  - Available callbacks
    - install/uninstall
    - check for installed modules
    - cancel install process

#### References

- https://www.youtube.com/watch?v=0raqVydJmNE
- https://github.com/googlesamples/android-dynamic-features
- https://proandroiddev.com/dynamic-feature-module-android-ondemand-module-android-app-bundle-ea0d872b32d
- https://www.youtube.com/watch?v=bViNOUeFuiQ

# Thanks!

**Contact Nimbl3** 

hello@nimbl3.com

399 Sukhumvit Road, Interchange 21 Klongtoey nua, Wattana Bangkok 10110

28C Stanley St, Singapore 068737

20th Floor, Central Tower 28 Queen's Road Central, Hong Kong

nimbl3.com

