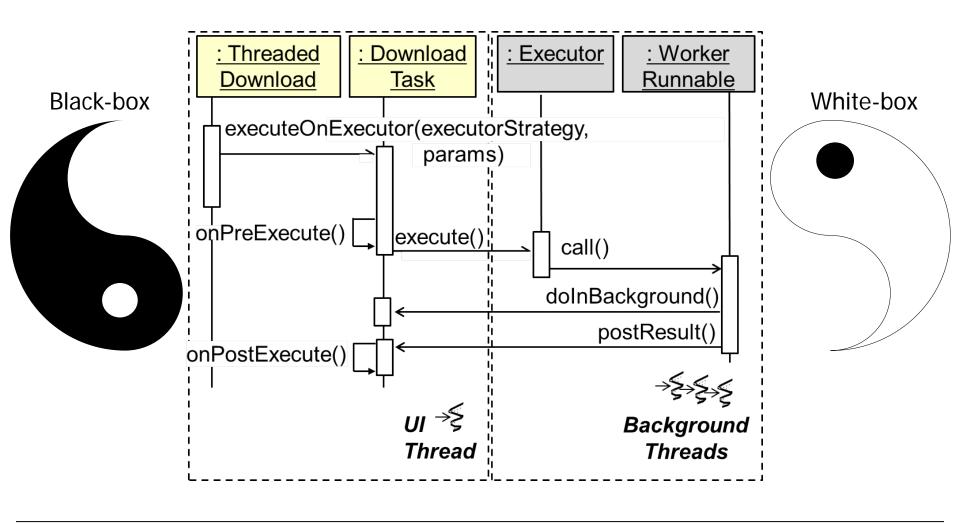
AsyncTask is a black-box & white-box framework



- AsyncTask is a black-box & white-box framework
- There are trade-offs between each approach
  - White-box frameworks are generally easier to develop...





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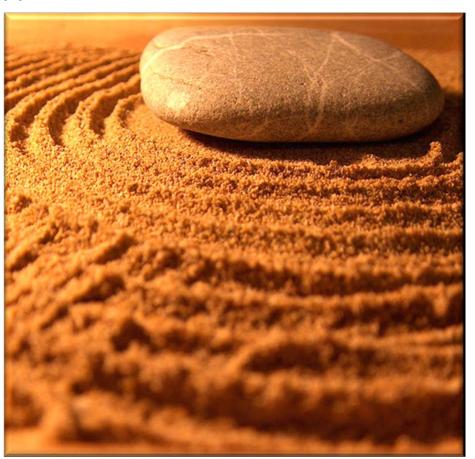
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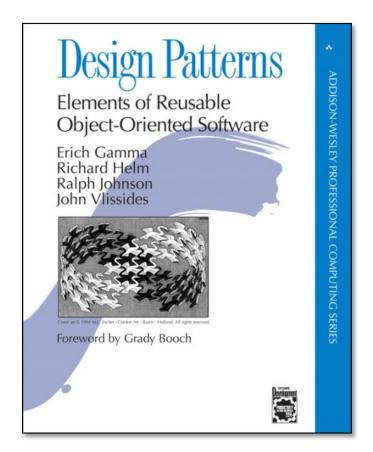
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See <a href="mailto:en.wikipedia.org/">en.wikipedia.org/</a> wiki/Plug-in\_(computing)

- AsyncTask is a black-box & white-box framework
- There are trade-offs between each approach
- AsyncTask uses several GoF patterns



- AsyncTask is a black-box & white-box framework
- There are trade-offs between each approach
- AsyncTask uses several GoF patterns
  - Template Method is used for its white-box capabilities

#### AsyncTask

execute()
cancel()
onPreExecute()
doInBackground()
onProgressUpdate()
onPostExecute()
onCancelled()

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## AsyncTask

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#### **ImageDownloadTask**

onPreExecute()
doInBackground()
onProgressUpdate()
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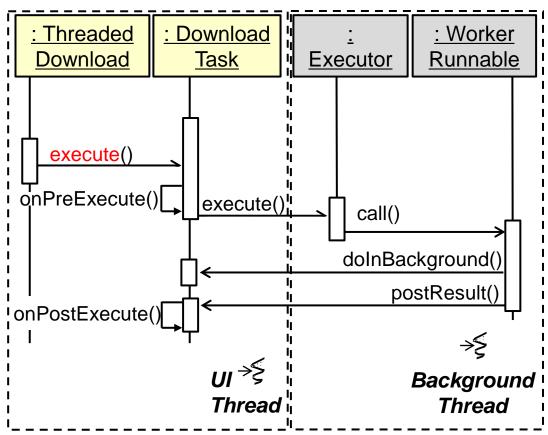
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execute()
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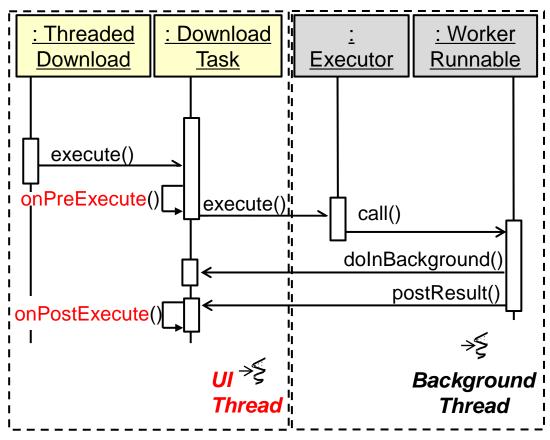
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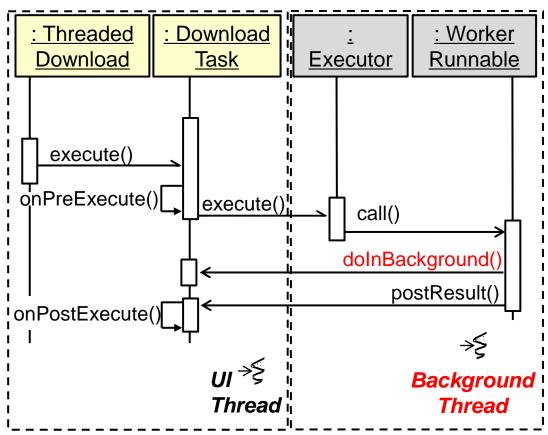
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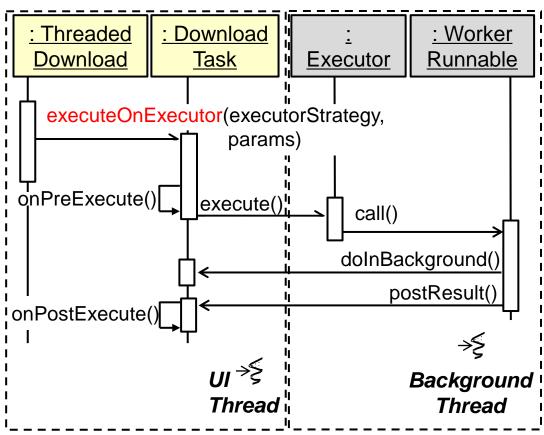
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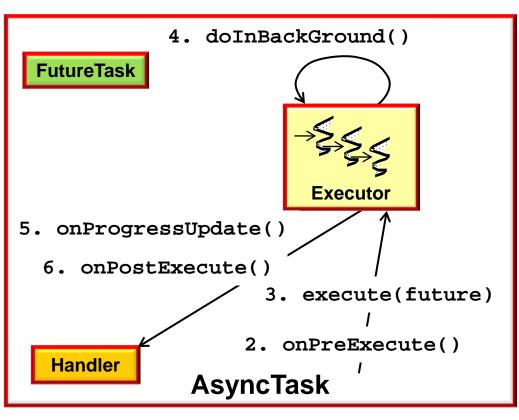
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- AsyncTask is a black-box & white-box framework
- There are trade-offs between each approach
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  - Template Method is used for its white-box capabilities
  - Strategy is used for its black-box capabilities

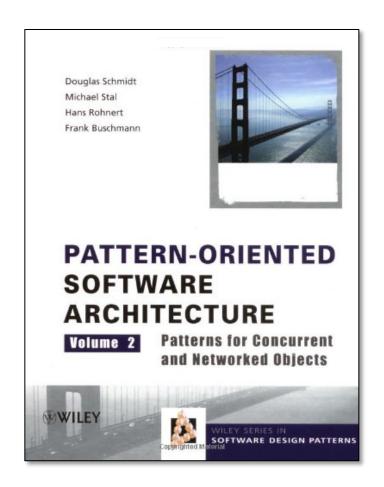


- AsyncTask is a black-box & white-box framework
- There are trade-offs between each approach
- AsyncTask uses several GoF patterns
  - Template Method is used for its white-box capabilities
  - Strategy is used for its black-box capabilities
  - Façade is used to simplify access to the Java

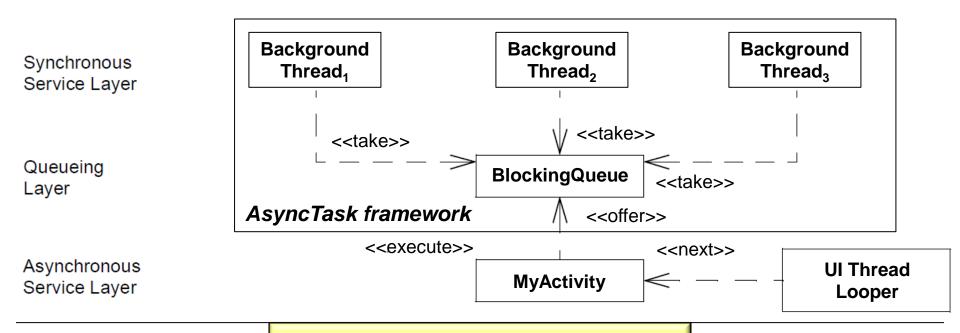


1. execute(url)

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- AsyncTask also uses several POSA patterns



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See upcoming discussions on "The Half-Sync/Half-Async Pattern"

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- There are trade-offs between each approach
- AsyncTask uses several GoF patterns
- AsyncTask also uses several POSA patterns
  - Half-Sync/Half-Async is used to coordinate between the UI Thread & background Thread(s)
  - Pooling is used to manage multiple instances of Threads, which allows for reuse when AsyncTasks release Threads they no longer need

