

ThumbnailDownloader

Creation, queueing, and processing

Ceci n'est pas une ThumbnailDownloader

<H>
Handler
(H, Bitmap) → Unit

*fragment
lifecycle
observer*

request map

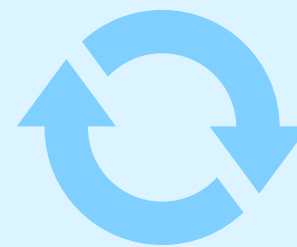
H

String

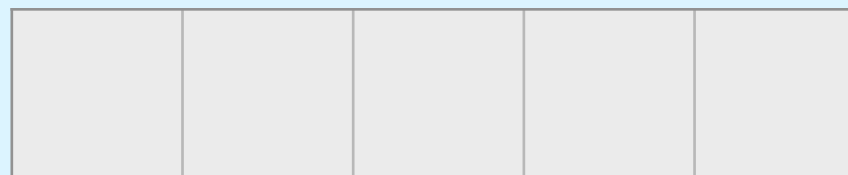
request handler

*view
lifecycle
observer*

Looper



Message Queue



ThumbnailDownloader

PGF on create

constructor

<PhotoHolder>
response handler
on photo downloaded

fragment
lifecycle
observer

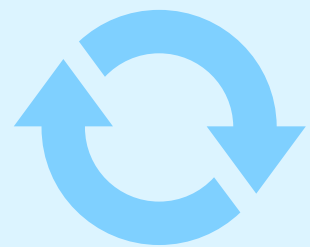
request map	
holder	url

Request map is
initialized during
declaration

request handler

view
lifecycle
observer

Looper

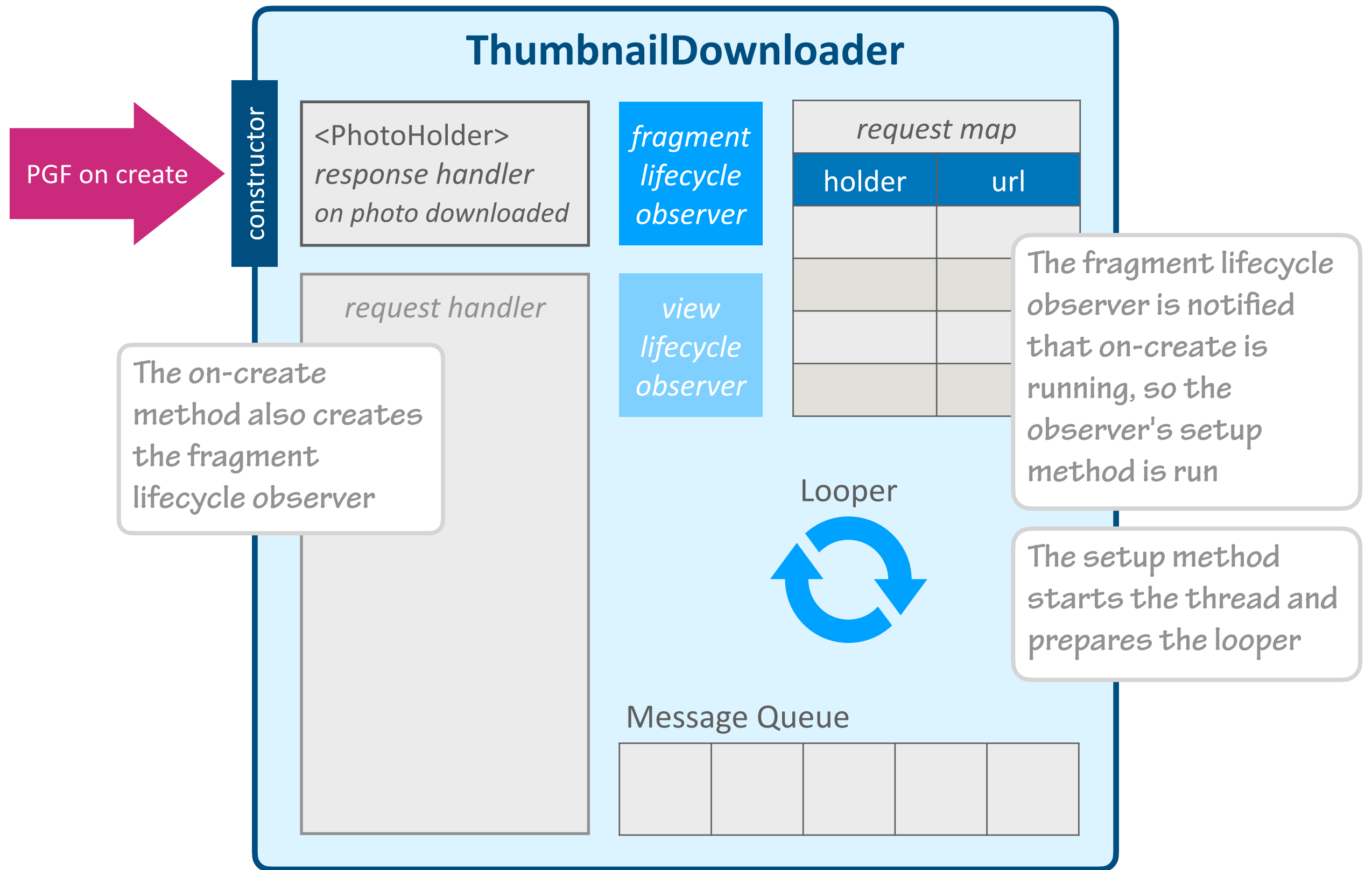


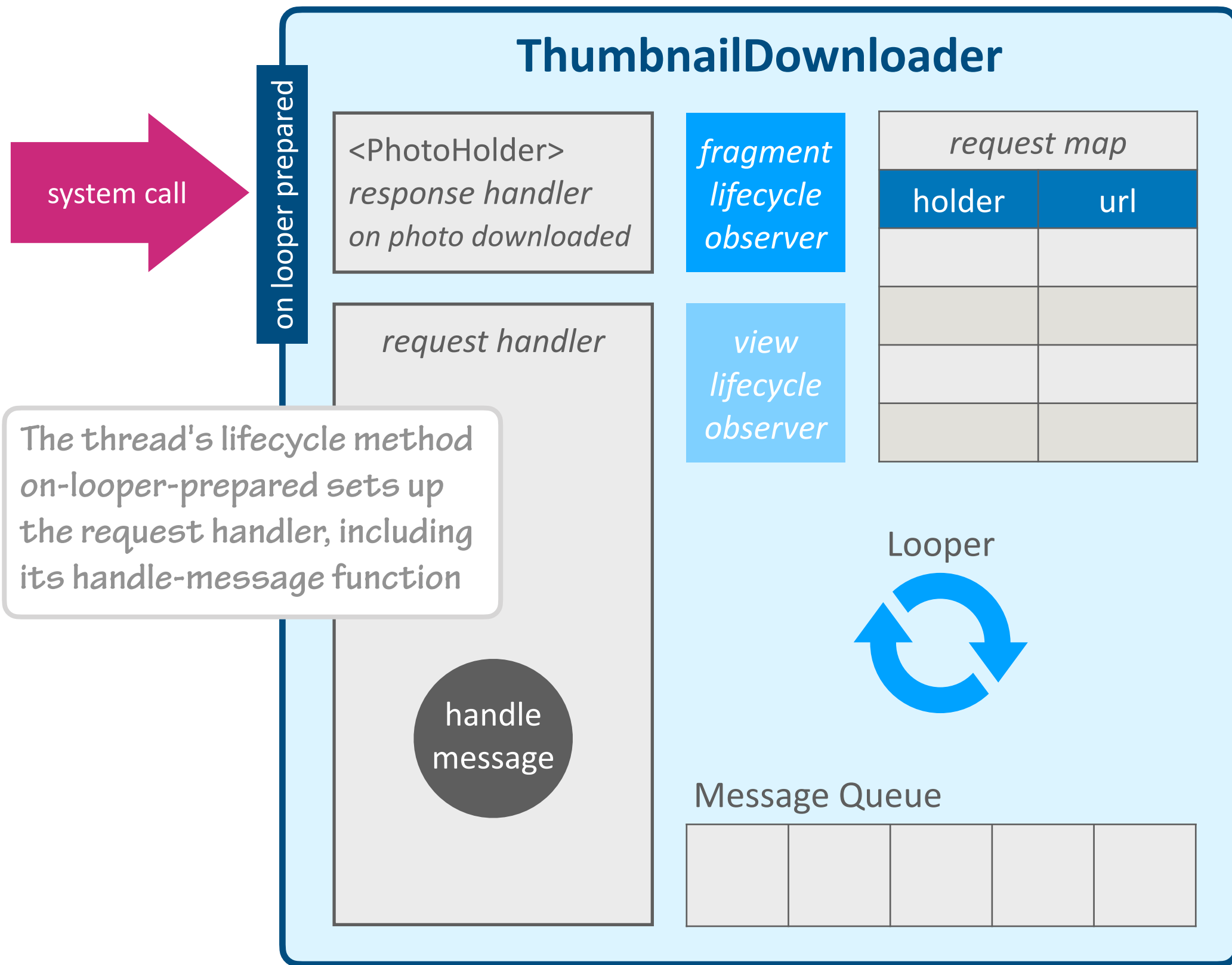
Message Queue



Thumbnail Downloader
is created inside the
on-create method of
PhotoGallery Fragment

The PhotoHolder type,
the response-handler
object, and the
on-photo-downloaded
function are passed in





ThumbnailDownloader

PGF on view created

<PhotoHolder>
response handler
on photo downloaded

fragment
lifecycle
observer

request map	
holder	url

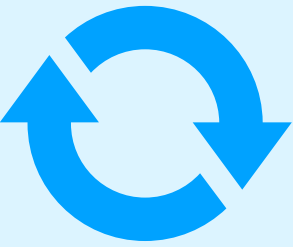
request handler

view
lifecycle
observer

PGF's on-view-created
creates the view
lifecycle observer

handle
message

Looper



Message Queue

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ThumbnailDownloader

*<PhotoHolder>
response handler
on photo downloaded*

*fragment
lifecycle
observer*

request map

holder

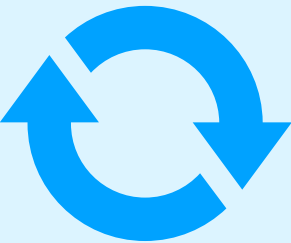
url

request handler

*view
lifecycle
observer*

All parts of thumbnail downloader
are now set up and the it is ready
to receive and process messages
(tasks)

Looper



handle
message

Message Queue



ThumbnailDownloader

<PhotoHolder>
response handler
on photo downloaded

*fragment
lifecycle
observer*

request map	
holder	url
PH #21	...abc.jpg
PH #22	...xyz.jpg
PH #23	...def.jpg

request handler

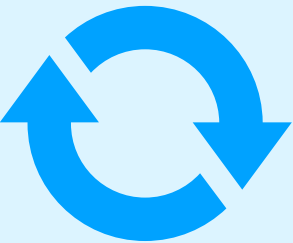
*view
lifecycle
observer*

Let's assume there are
already a few messages
in the queue

And let's look at the
process for adding
another message to
the queue

handle
message

Looper

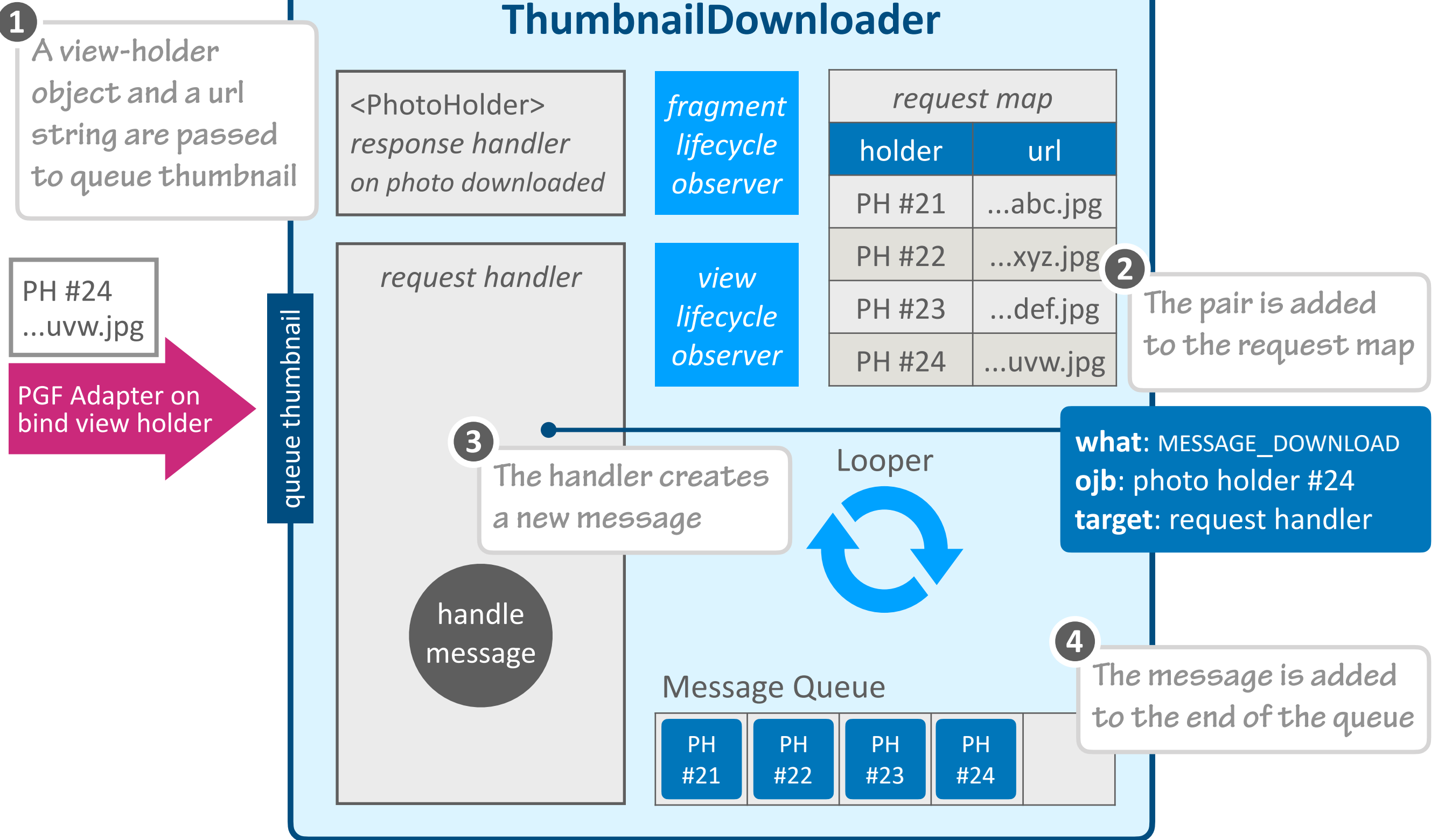


Message Queue

PH #21	PH #22	PH #23		
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enqueueing a message

ThumbnailDownloader



ThumbnailDownloader

<PhotoHolder>
response handler
on photo downloaded

fragment
lifecycle
observer

request map	
holder	url
PH #21	...abc.jpg
PH #22	...xyz.jpg
PH #23	...def.jpg
PH #24	...uvw.jpg

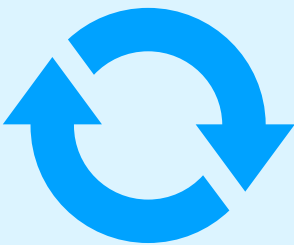
request handler

view
lifecycle
observer

Now let's see how a
message from the
queue gets processed

handle
message

Looper



Message Queue

PH #21	PH #22	PH #23	PH #24	
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processing a message

ThumbnailDownloader

