

SCROLL VIEW

SCROLL

SECTION 3

SCROLL VIEW RECIPES

INTRODUCTION

SECTION OVERVIEW

- Two scroll view recipes:
 - Slide out navigation
 - Custom pull to refresh
- Animated elements

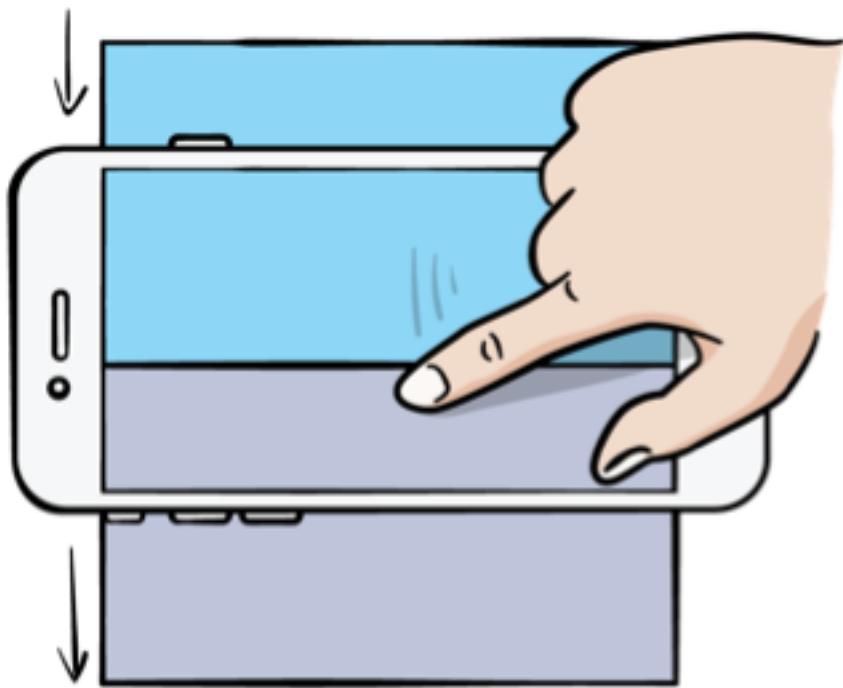


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SLIDE OUT SIDEBAR

WHY SCROLL VIEWS

- Layout
- Pan gesture
- Paging
- Great Learning Experience!



LEFT SIDEBAR NAVIGATION

| | | |
|--------------|---|-----------------|
| Menu | ☰ | Winter Icons |
| Summer Icons | | Ornament |
| Winter Icons | | Candy Cane |
| | | Snowman |
| | | Penguin |
| | | Santa Hat |
| | | Gift |
| | | Gingerbread Man |
| | | Christmas Tree |
| | | Snowflake |
| | | Reindeer |



The sidebar navigation includes a menu icon (three horizontal lines) and a list of winter icons. The icons are arranged in three rows: the first row contains Ornament, Candy Cane, and Snowman; the second row contains Penguin, Santa Hat, and Gift; the third row contains Gingerbread Man, Christmas Tree, and Snowflake. The Reindeer icon is located below the third row. The 'Winter Icons' section is currently selected.



LEFT SIDEBAR NAVIGATION

Menu

Summer Icons

Winter Icons

Winter Icons

Ornament

Candy Cane

Snowman

Penguin

Santa Hat

Gift

Gingerbread Man

Christmas Tree

Snowflake

Reindeer



LEFT SIDEBAR NAVIGATION

Menu

Summer Icons

Winter Icons

Winter Icons

Ornament

Candy Cane

Snowman

Penguin

Santa Hat

Gift

Gingerbread Man

Christmas Tree

Snowflake

Reindeer

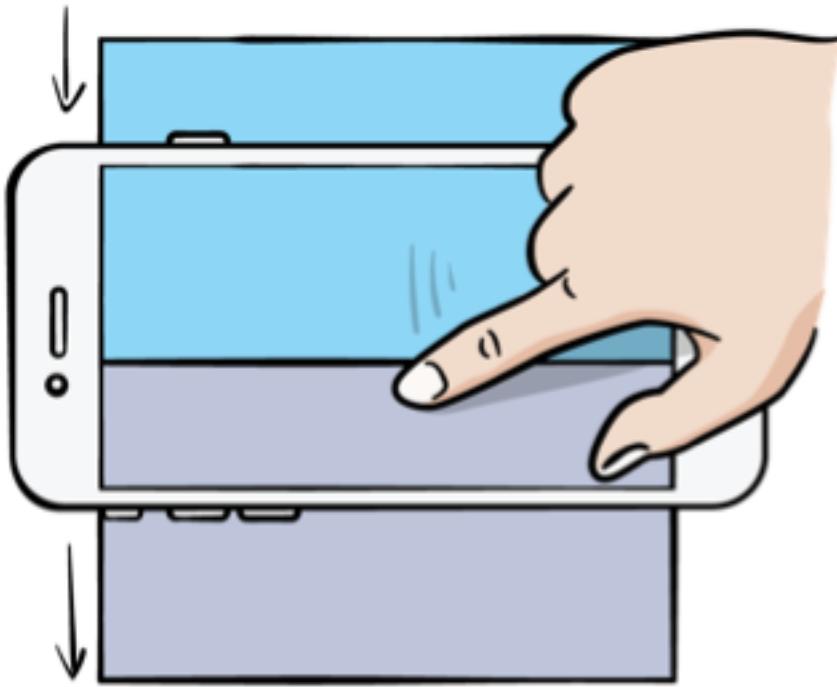




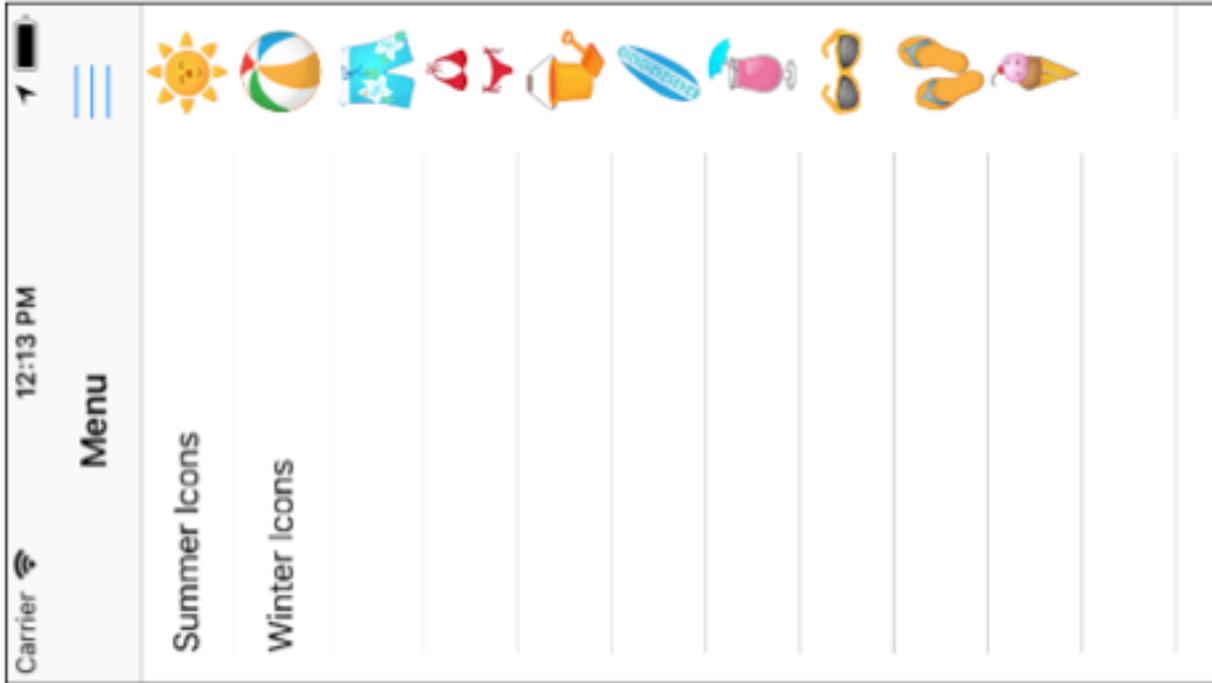
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CHALLENGE: SCROLL VIEW OFFSET



Summer Icons

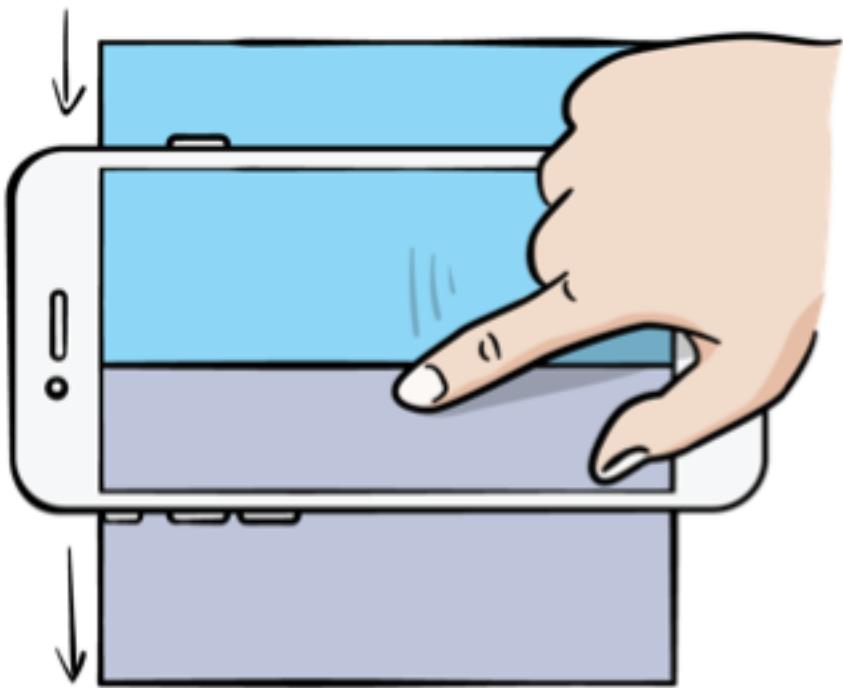
| | | |
|--|-------------------------------|------------------------|
| | Sun | A beautiful day |
| | Beach Ball | Fun in the sand |
| | Swim Trunks | Time to go swimming |
| | Bikini | Fun in the sun |
| | Sand Bucket and Shovel | Castles in the sand |
| | Surfboard | Catch a wave |
| | Strawberry Daiquiri | Great way to relax |
| | Sunglasses | I wear mine at night |
| | Flip Flops | Sand between your toes |
| | Ice Cream | A summer treat |



CHALLENGE

- Created closeMenuAnimated method
 - Has an animated Bool parameter
 - Calls setContentOffset on scroll view
 - Takes a CGPoint.
 - The x coordinate is the leftViewController
 - The y coordinate is 0
 - Pass in the animated parameter
- Call method in viewDidLoadSubviews
 - Make sure the method is called once





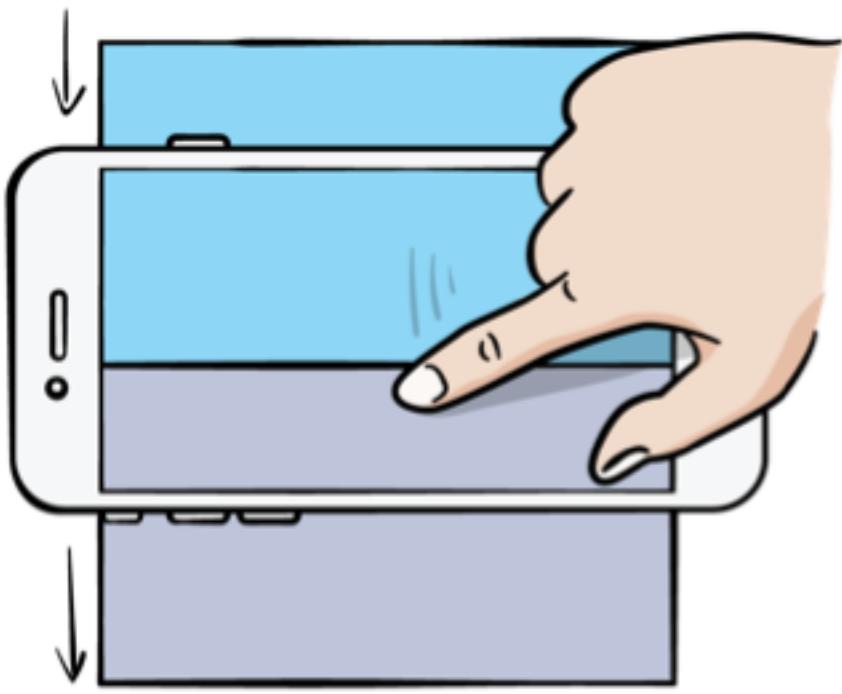
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FIXING SLIDE OUT ISSUES

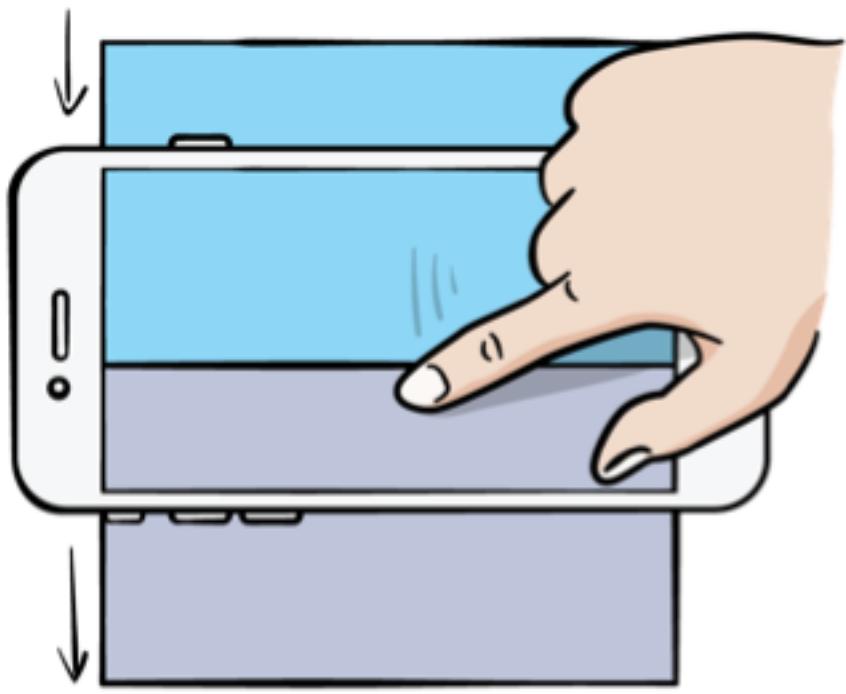


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REFRESH CONTROL



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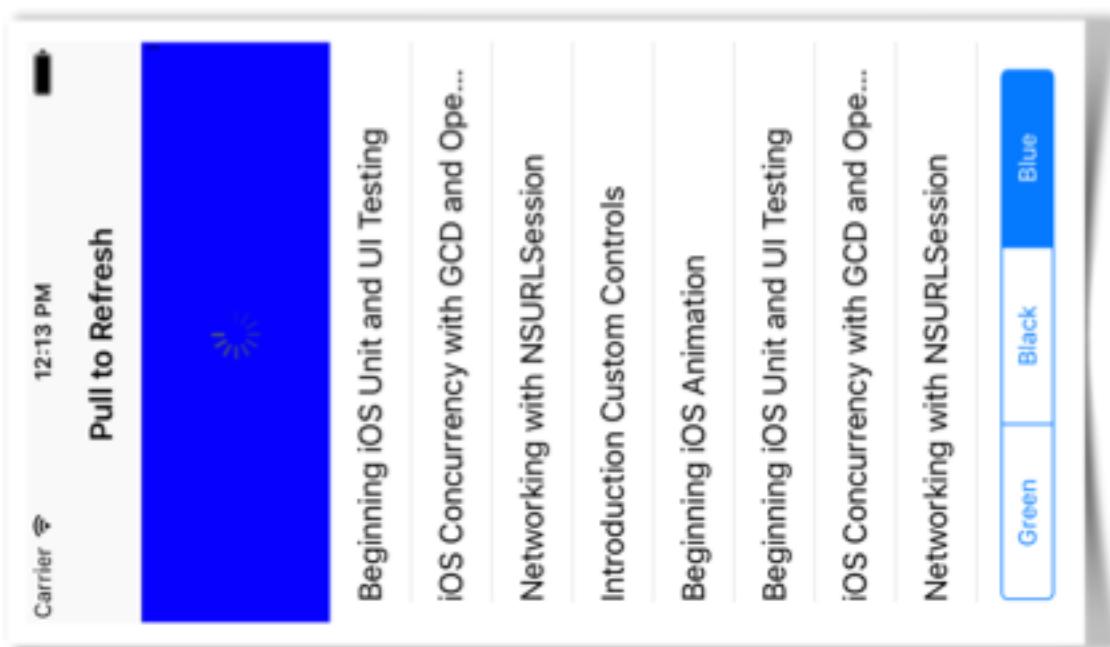
CHALLENGE: ADD REFRESH CONTROL

CHALLENGE

- Add UIRefreshControl object to refreshControl property
- Change background color of refresh control based on segmented control



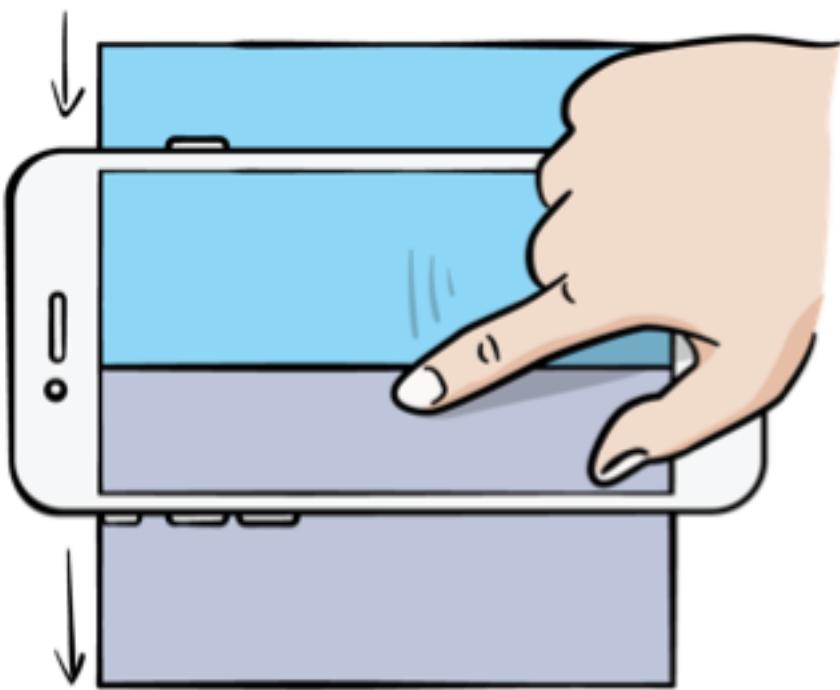
REFRESH CONTROL



CHALLENGE

- Add UIRefreshControl object to refreshControl property
- Change background color of refresh control based on segmented control





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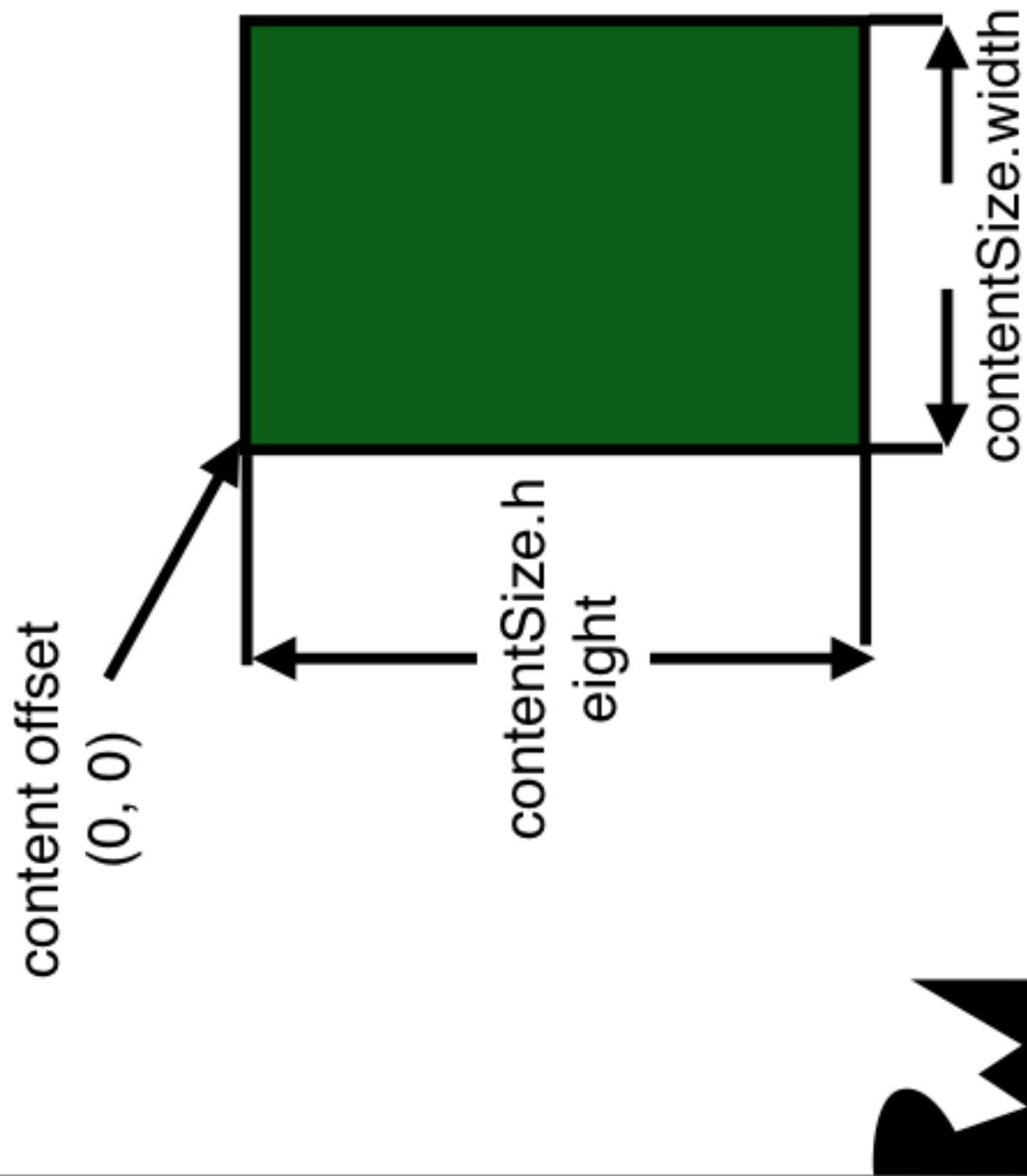
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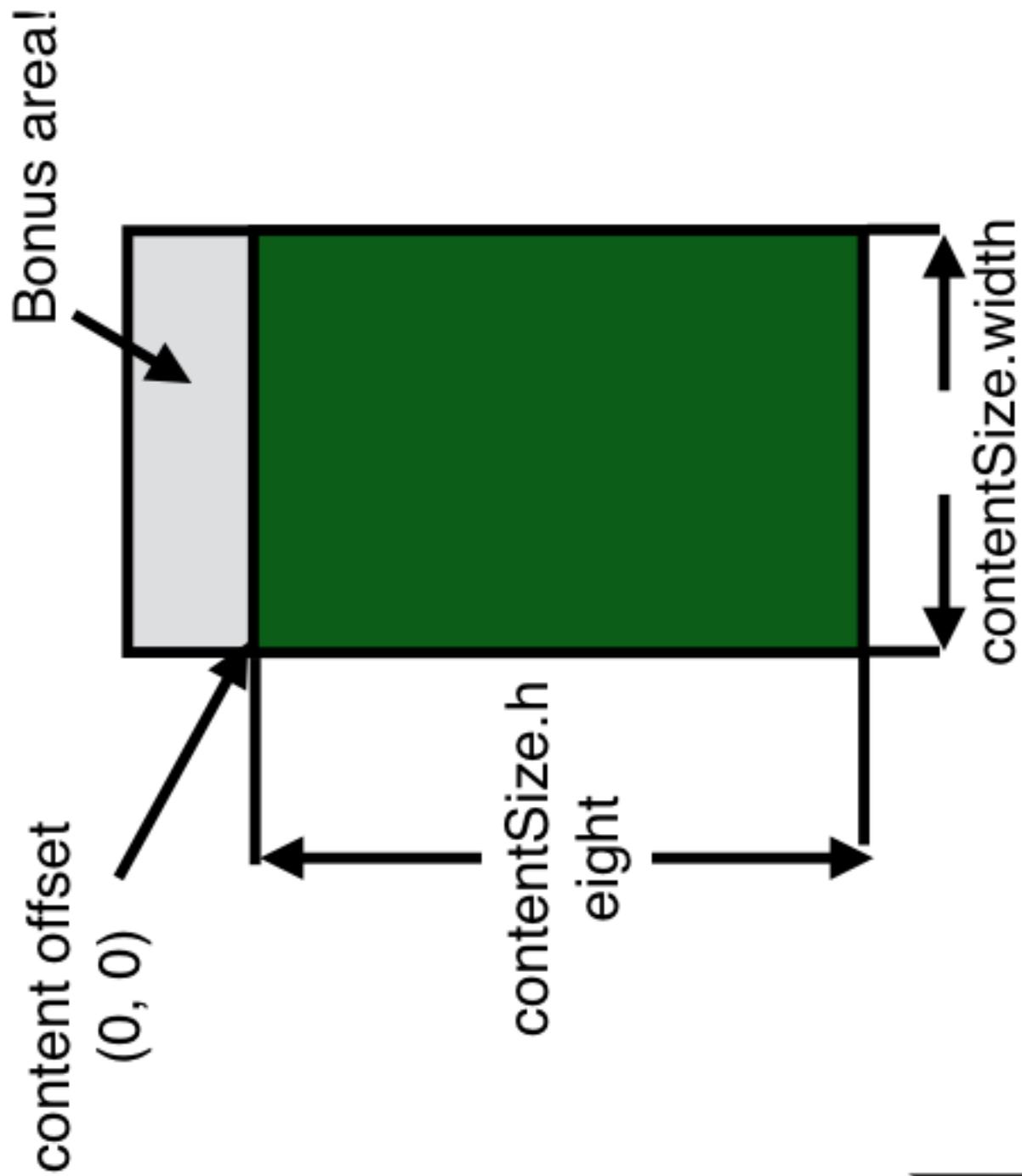


CUSTOM REFRESH CONTROL

PULL-TO-REFRESH: OVERVIEW



PULL-TO-REFRESH: OVERVIEW



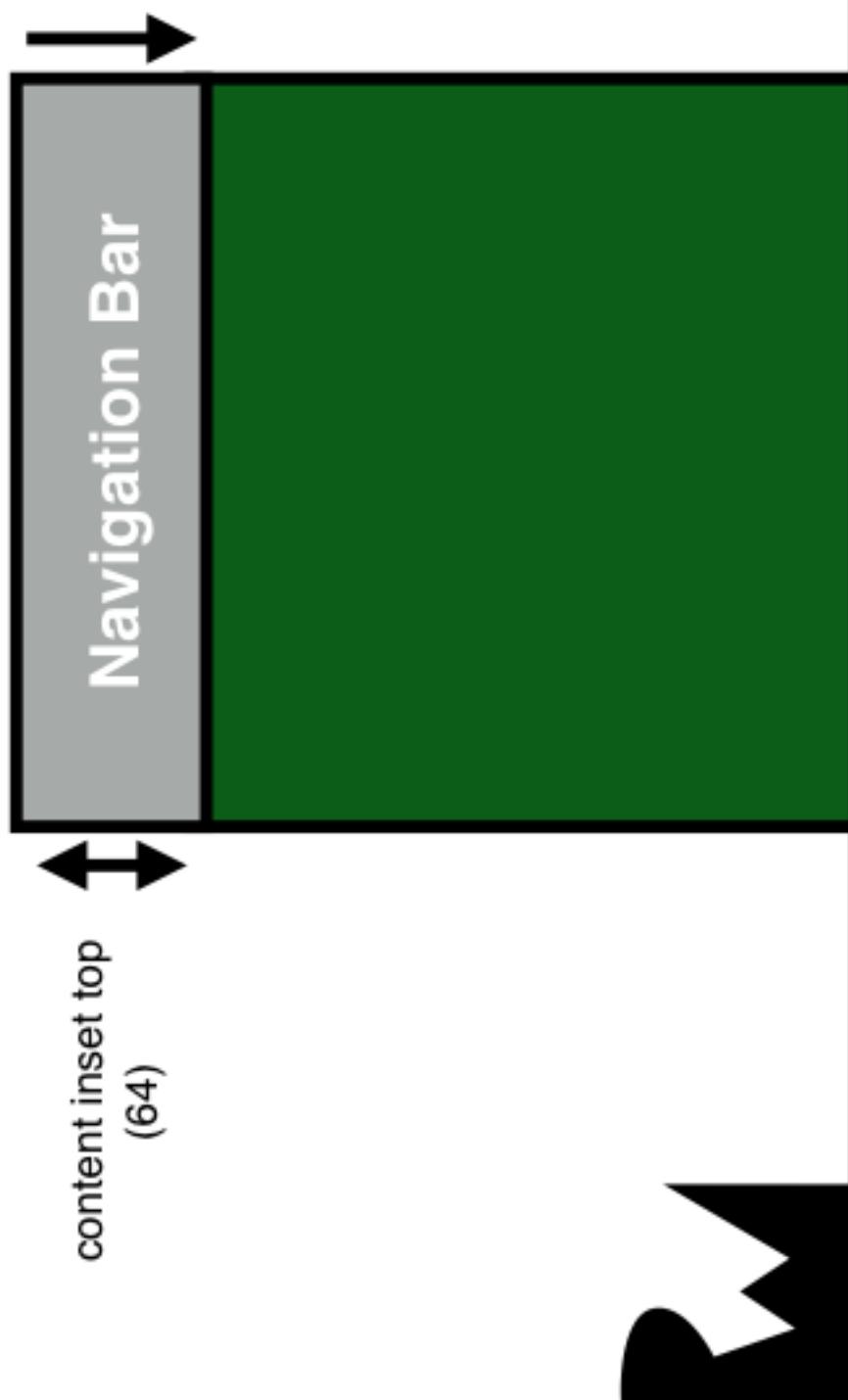
PULL-TO-REFRESH: OVERVIEW

- Modify content as user scrolls
- When you pull down “enough”, lock the refresh view and do the refresh work.



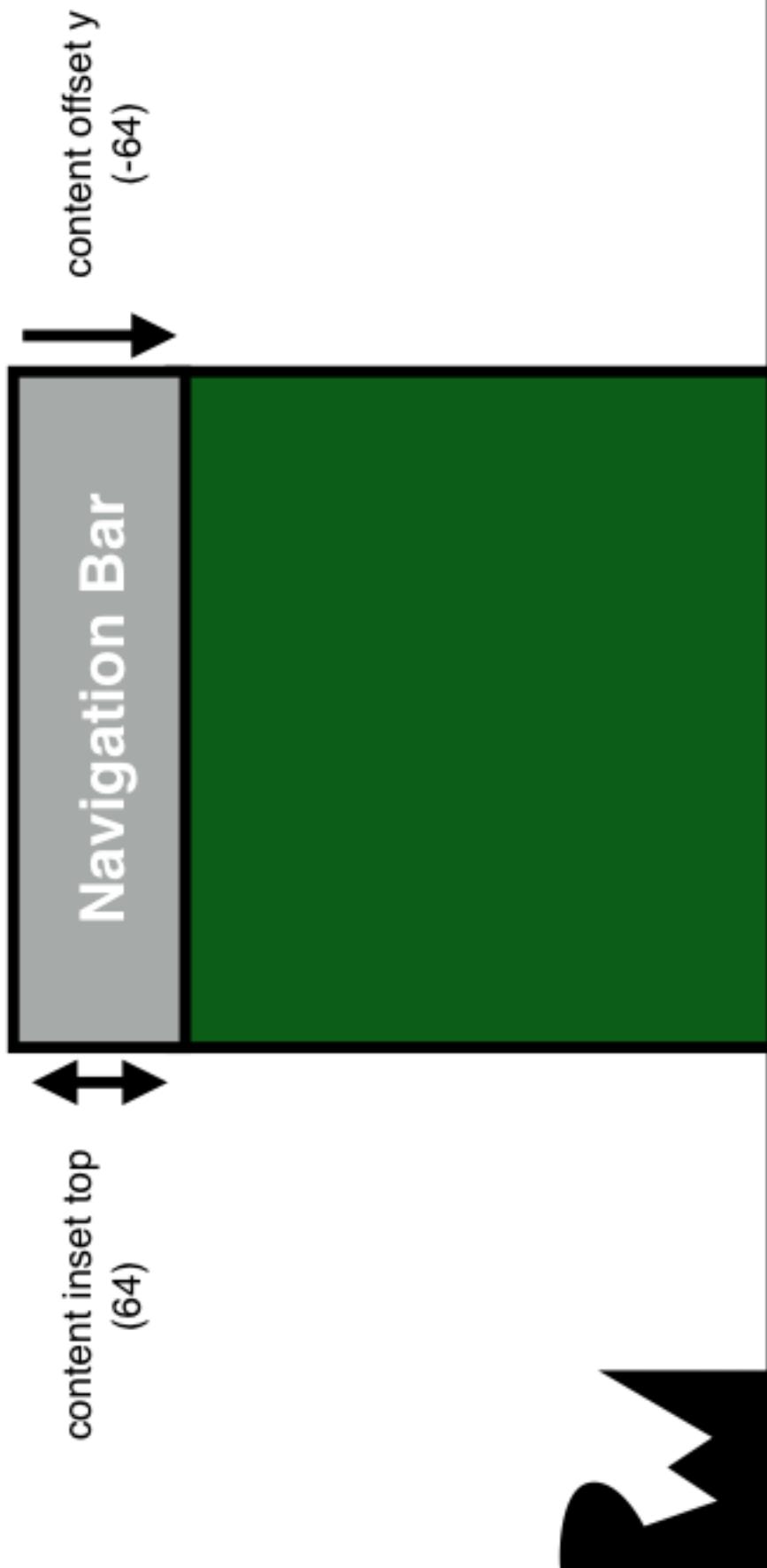
DETECTING SCROLL PROGRESS

- ⚙️ How much of the refresh view is visible



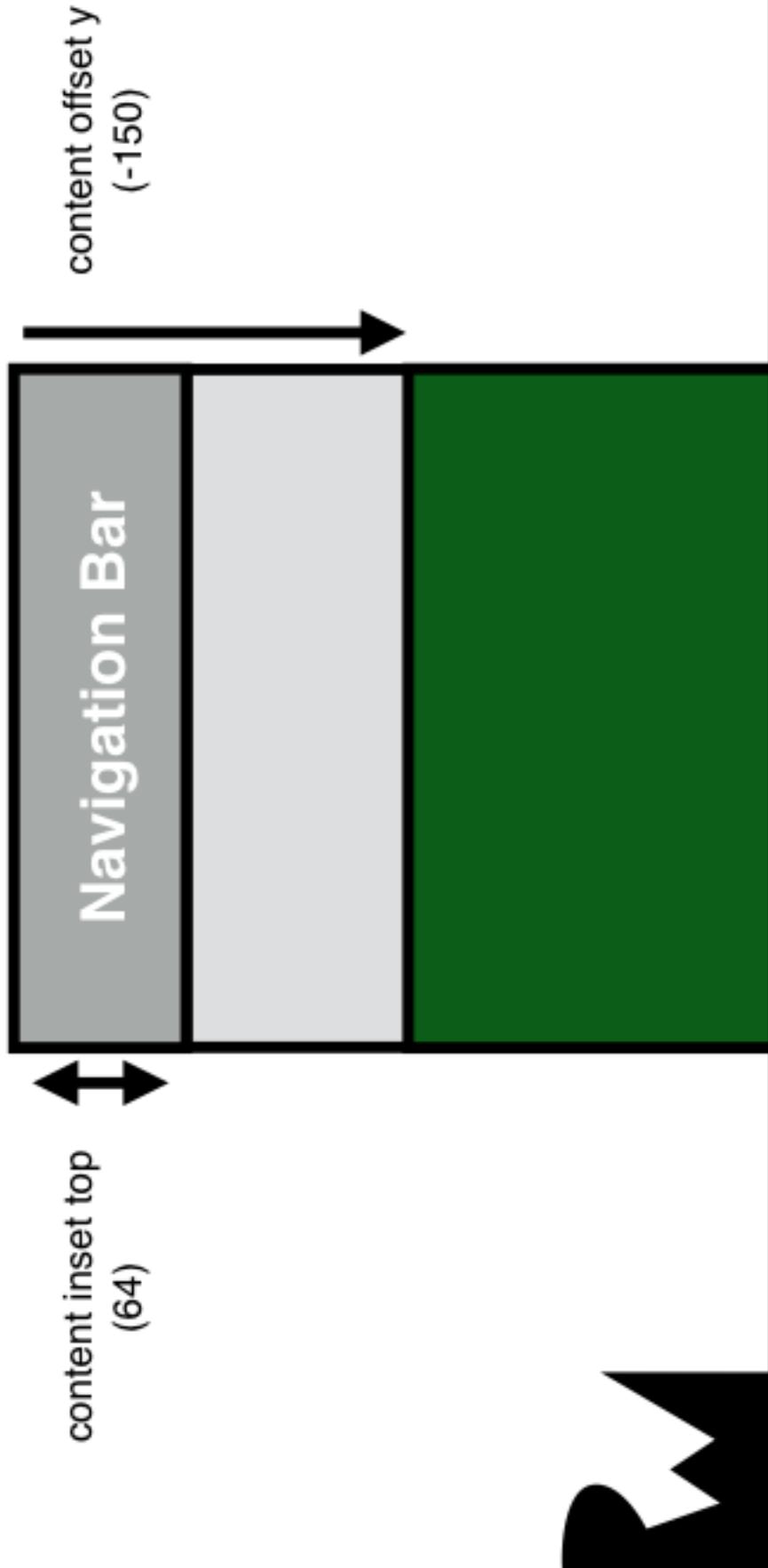
DETECTING SCROLL PROGRESS

- ⚙️ How much of the refresh view is visible



DETECTING SCROLL PROGRESS

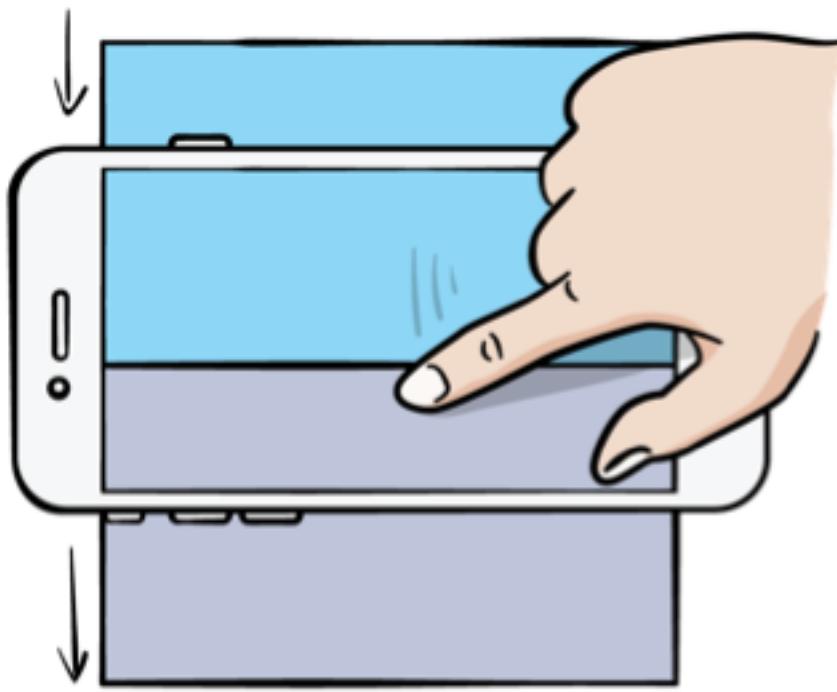
- ⚙️ How much of the refresh view is visible



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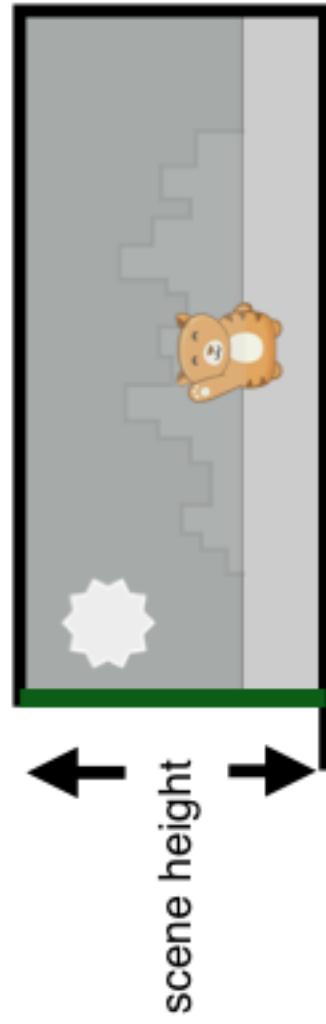


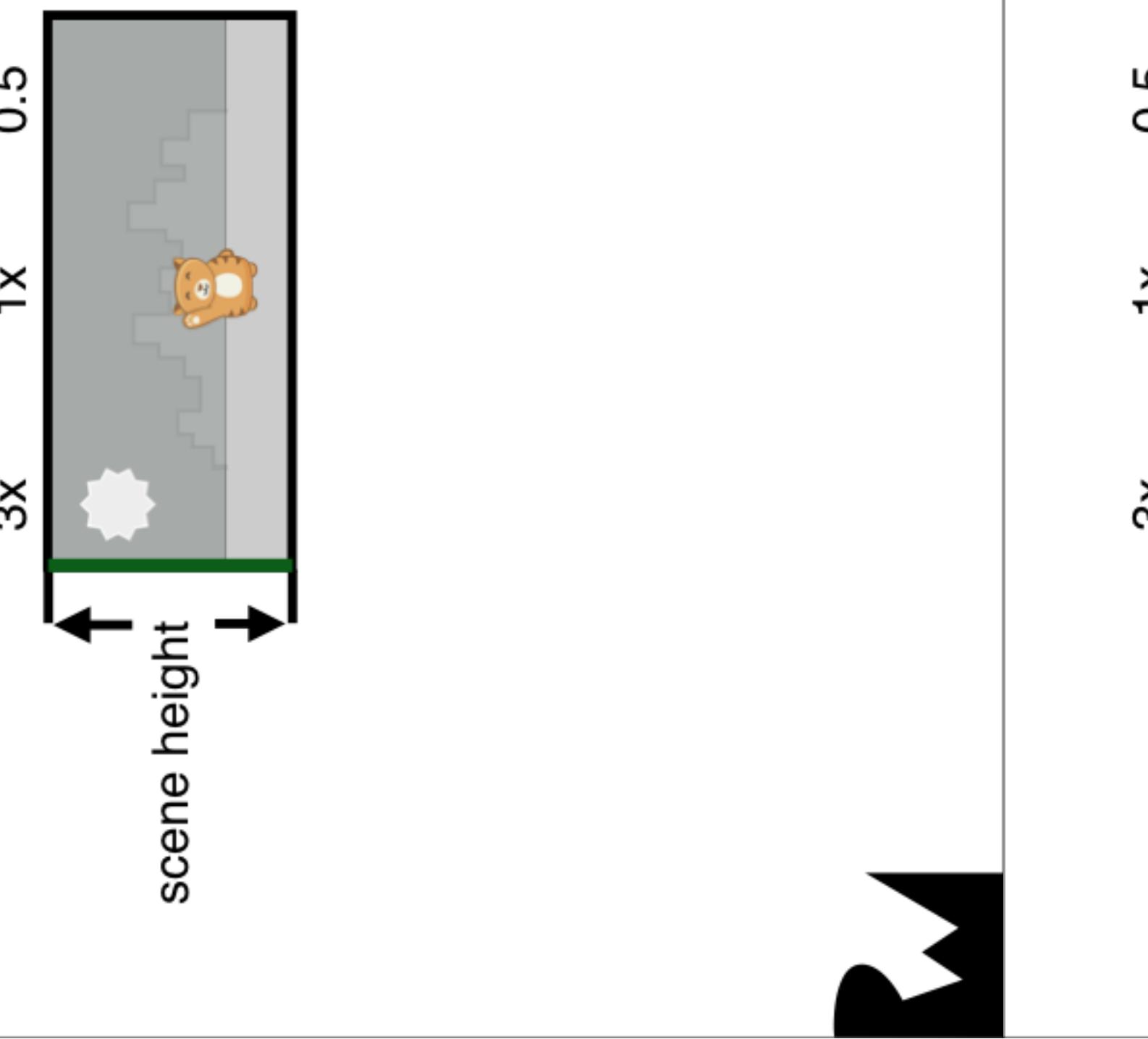
PARALLAX SCROLLING

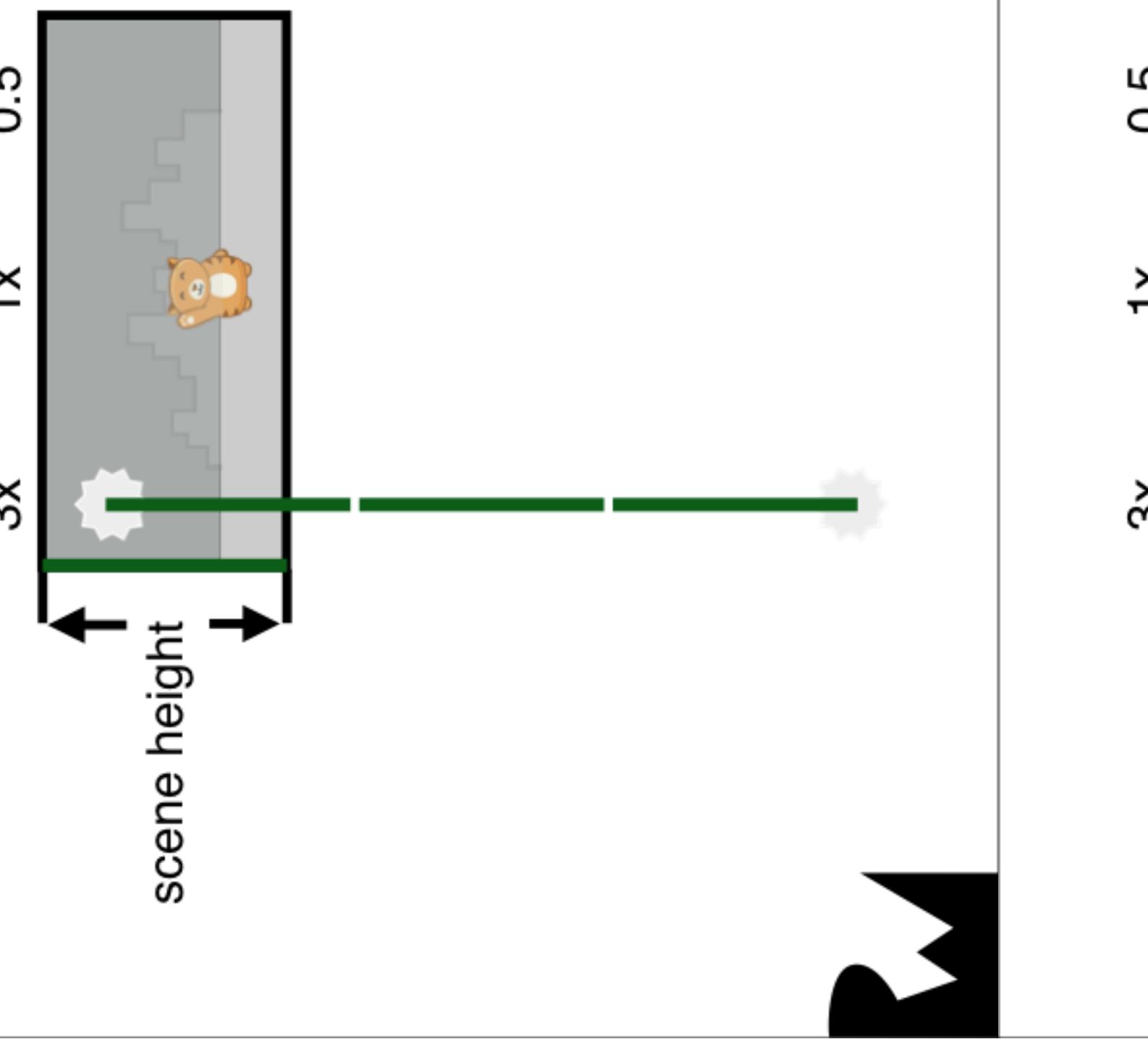
PARALLAX SCROLLING

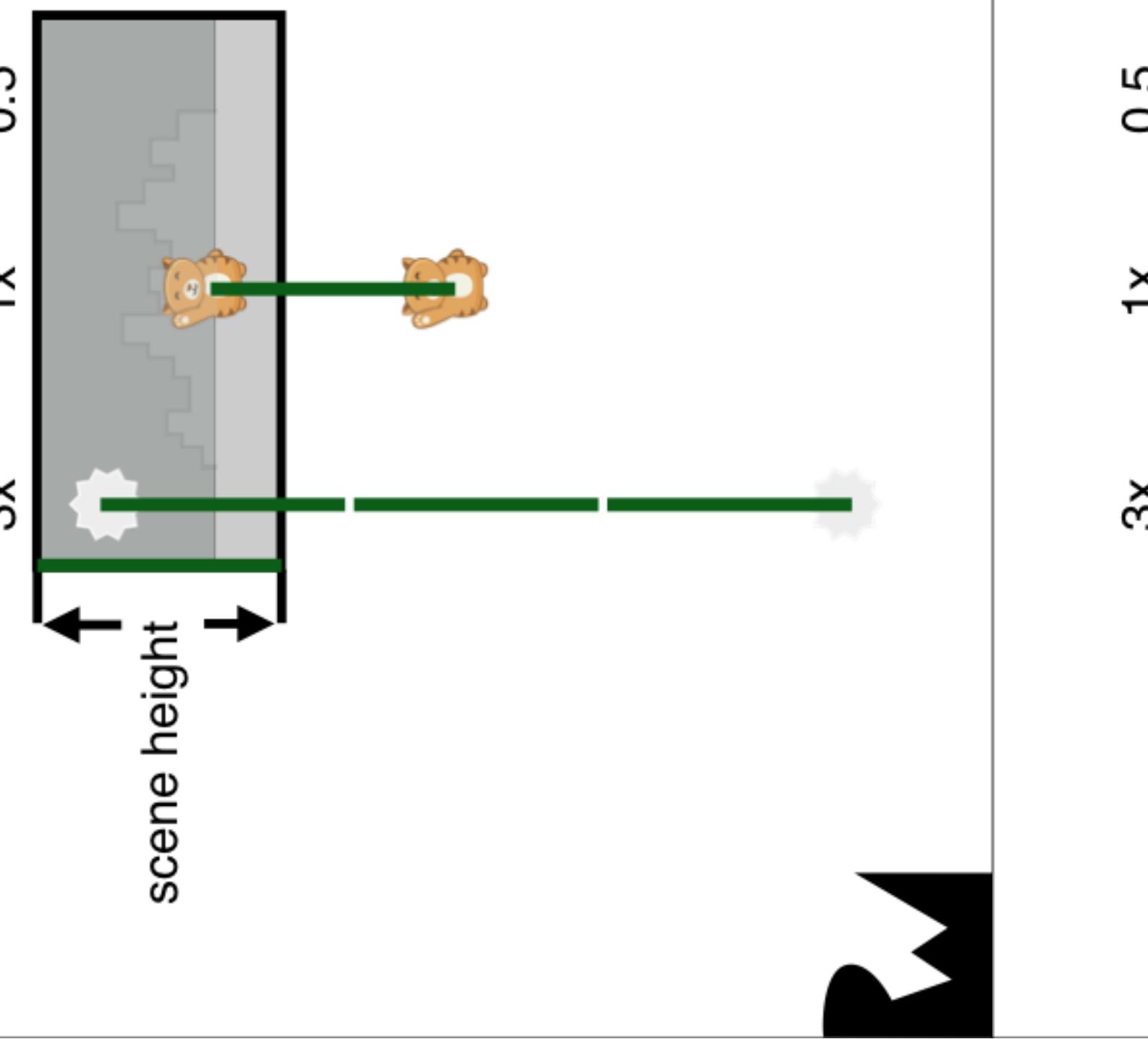
ANALYSTS' CHULLING

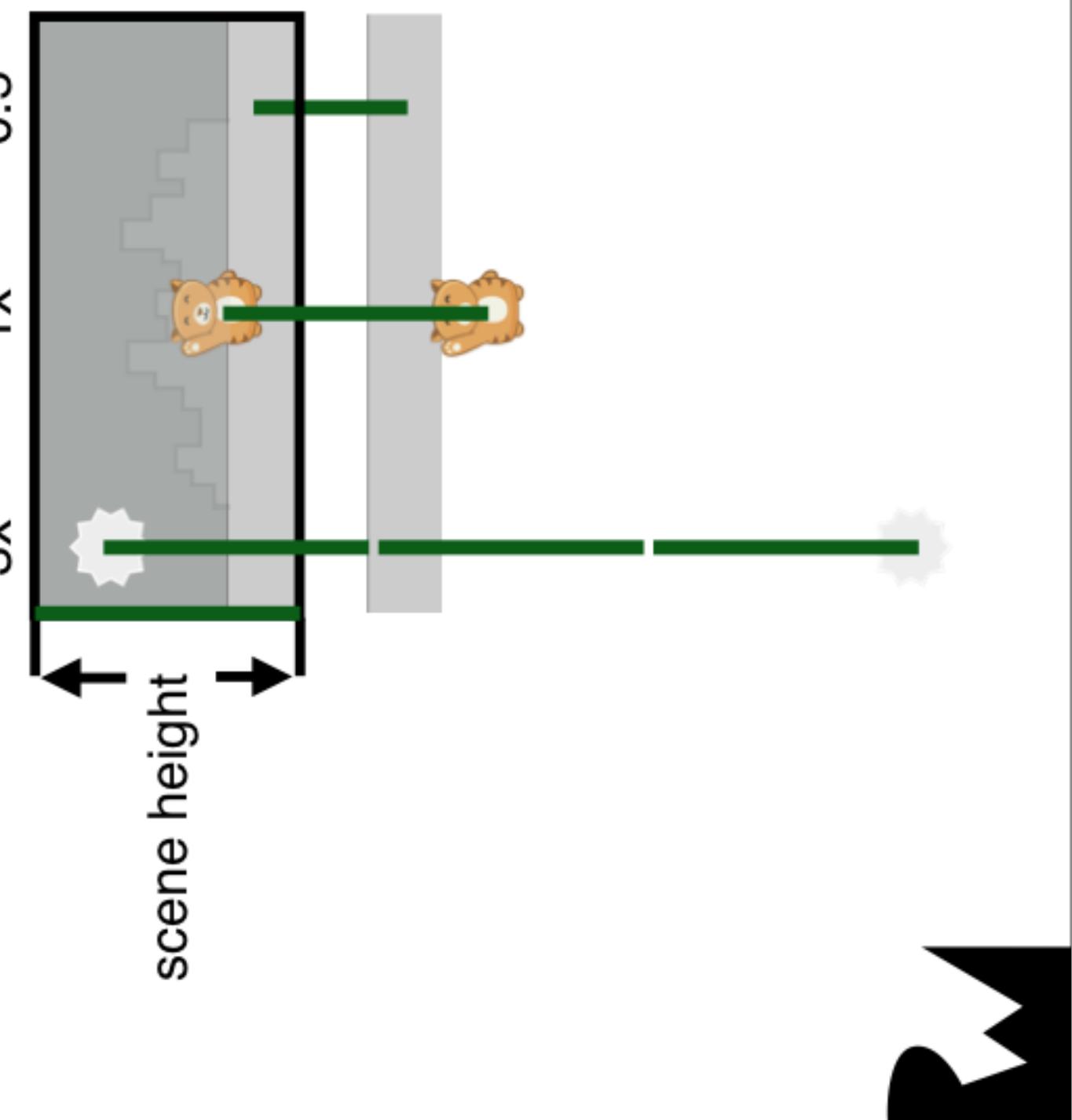
- We know:
 - Scene height
 - End pos y
 - Parallax ratio
 - Start pos y = End pos y + (parallax ratio * scene height)











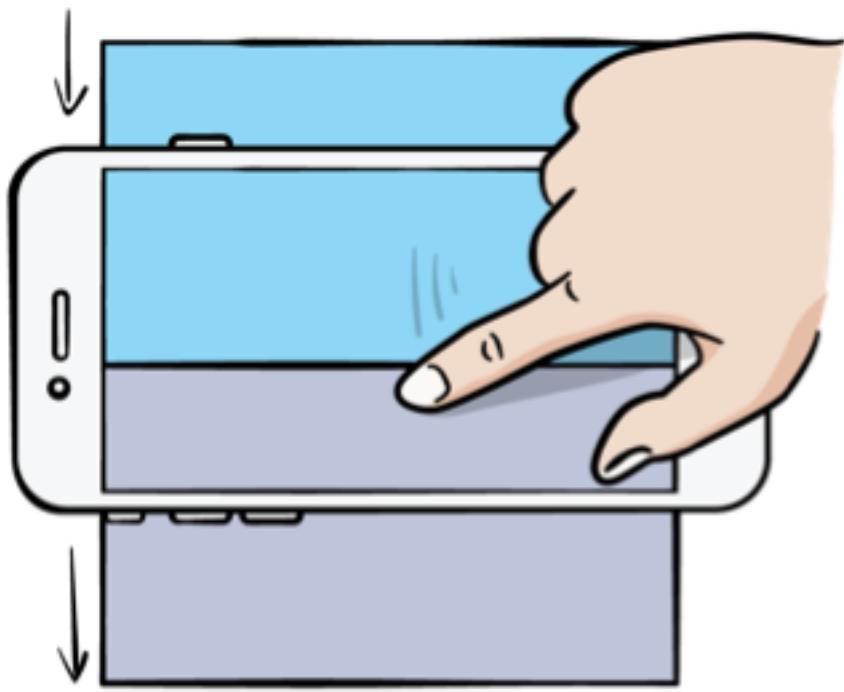
second

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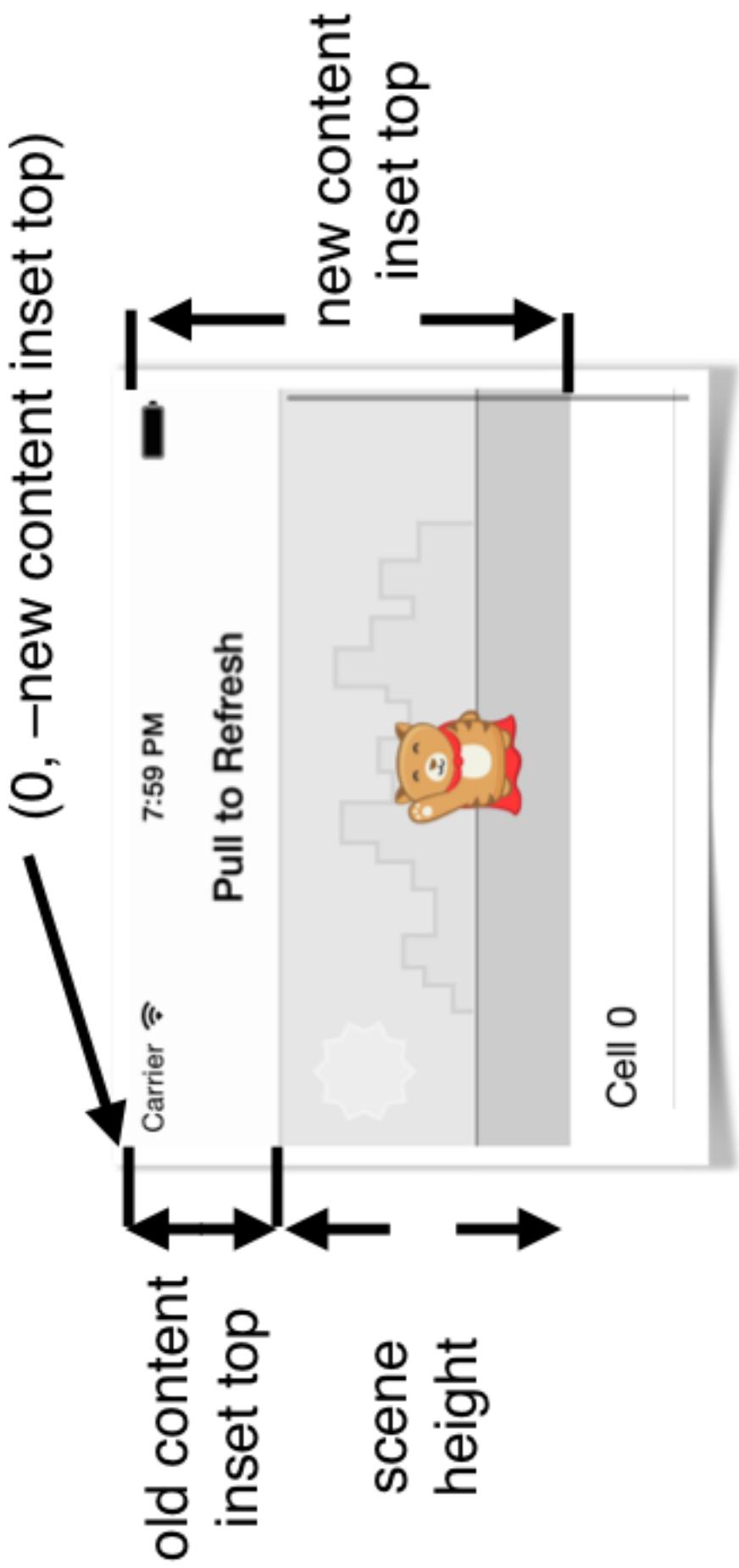
LOCKING SCROLL VIEWS

LOCKING AND REFRESHING

- Want to “lock” refresh view to visible
 - Need to know when dragging ends
 - scrollViewWillEndDragging(_withVelocity:targetContentOffset:)



LOCKING AND REFRESHING



LOCKING AND REFRESHING

- **Content inset top** = old content
 $\text{inset top} + \text{scene height}$
- **Content offset y** = 0 - new content
 inset top



LOCKING AND REFRESHING



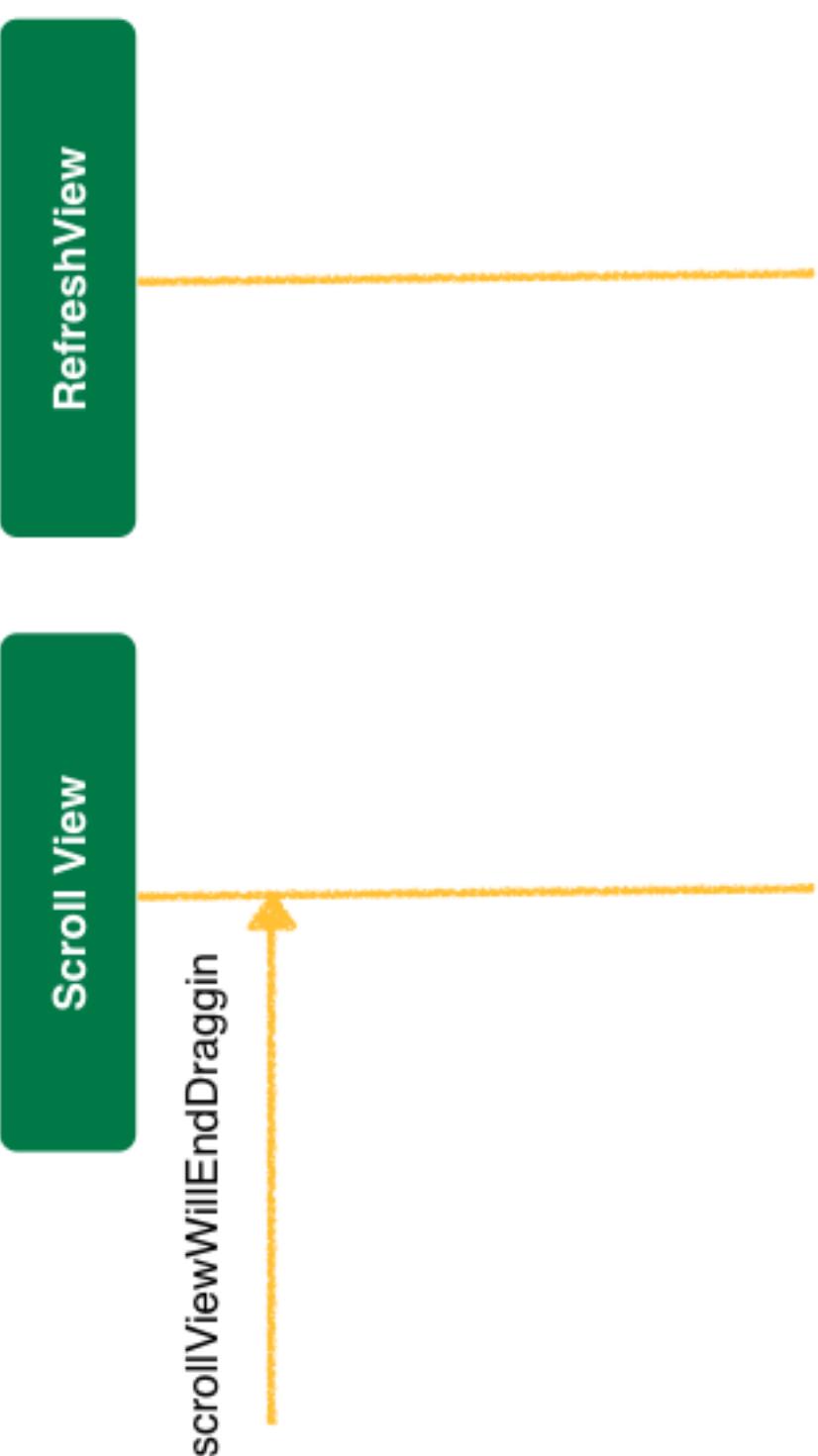
RefreshView



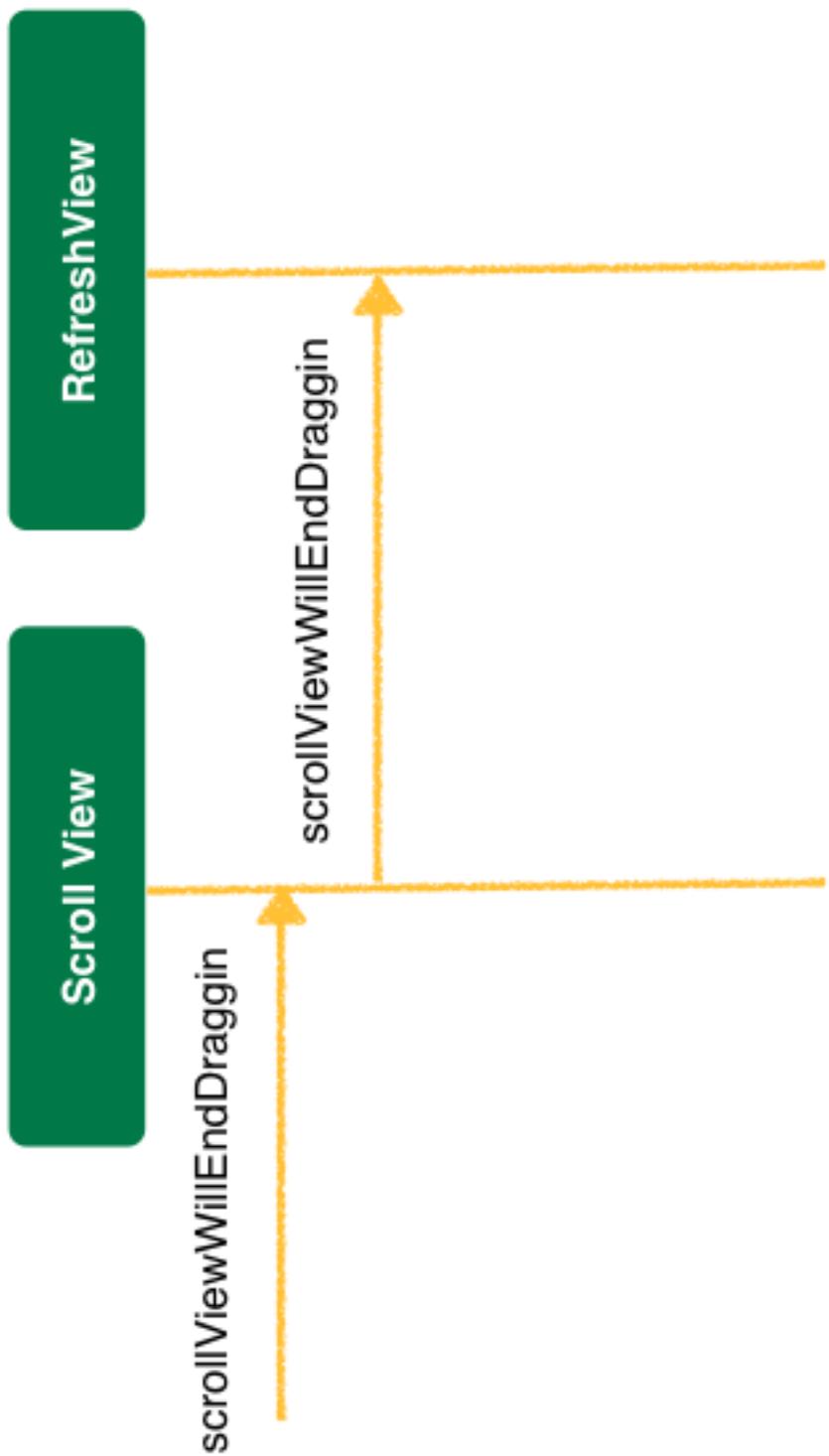
Scroll View



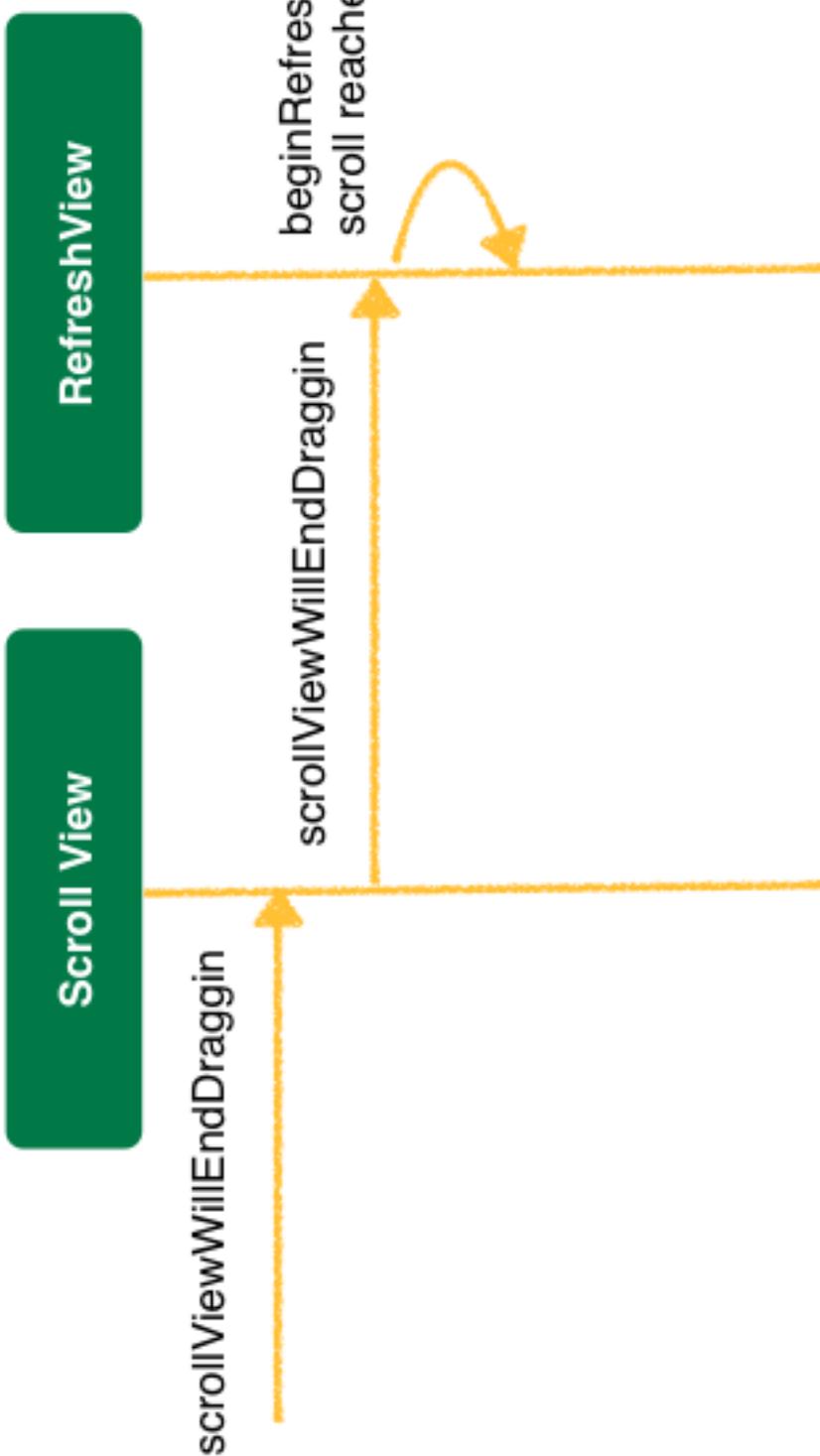
LOCKING AND REFRESHING



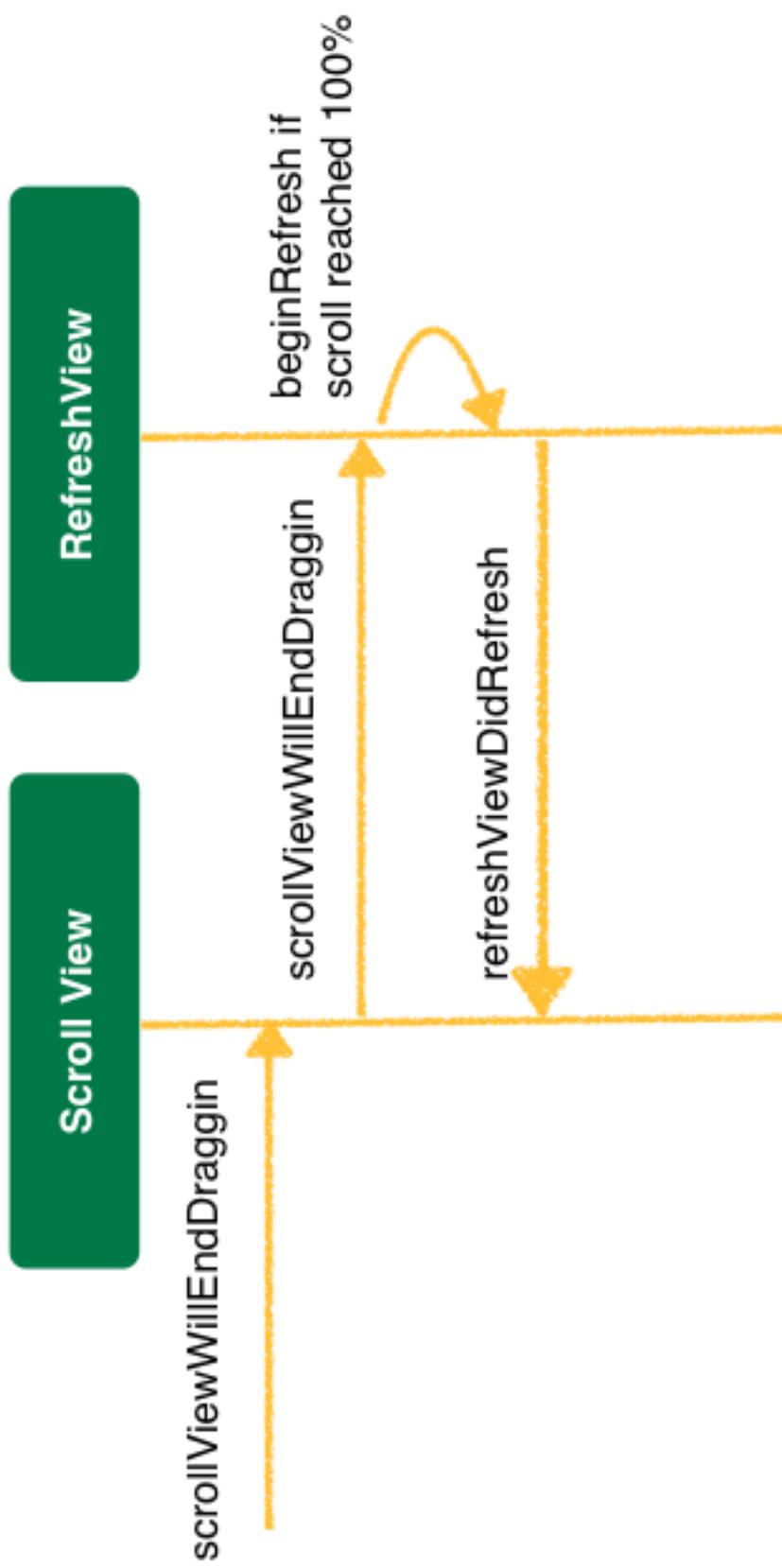
LOCKING AND REFRESHING



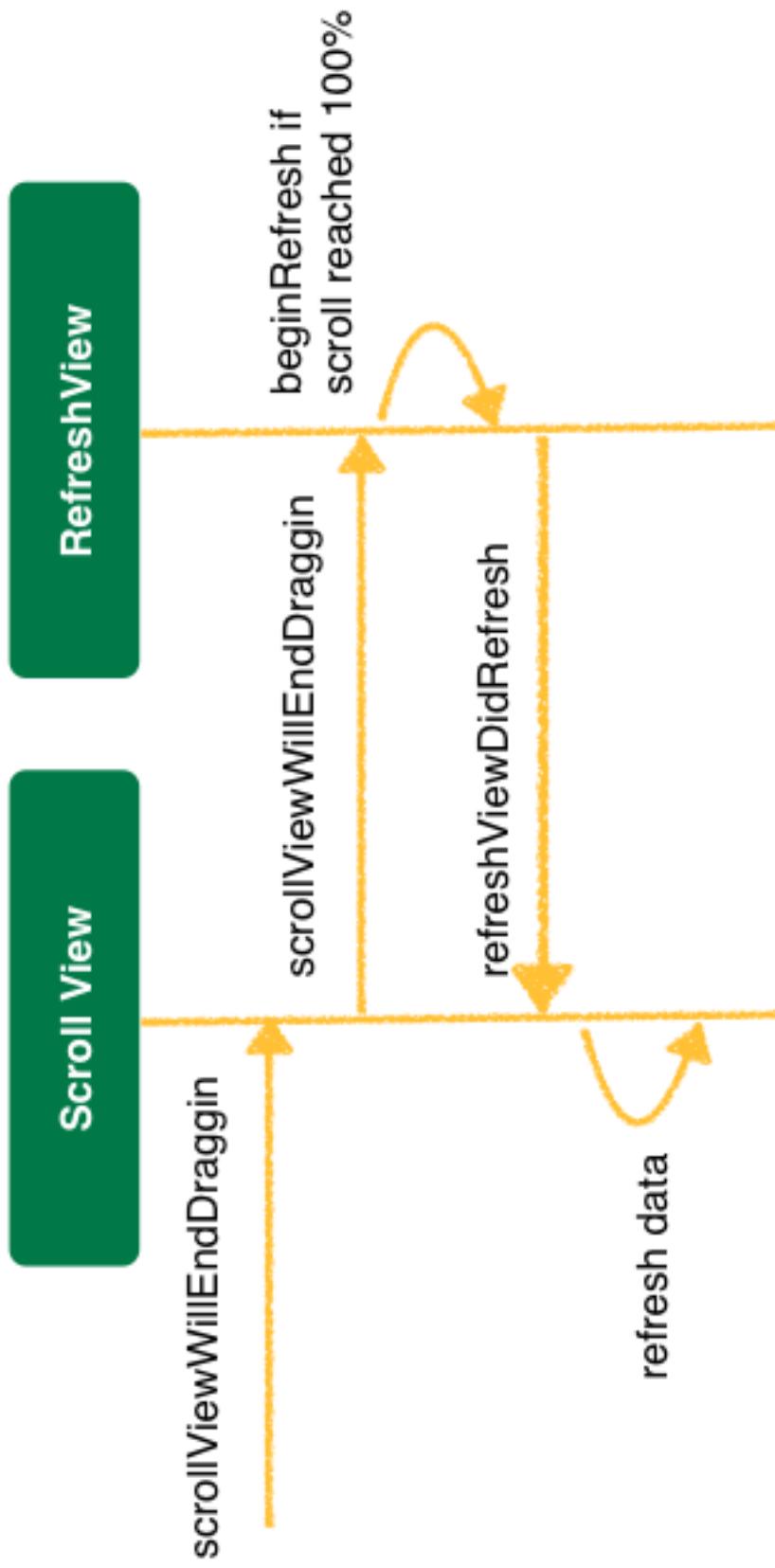
LOCKING AND REFRESHING

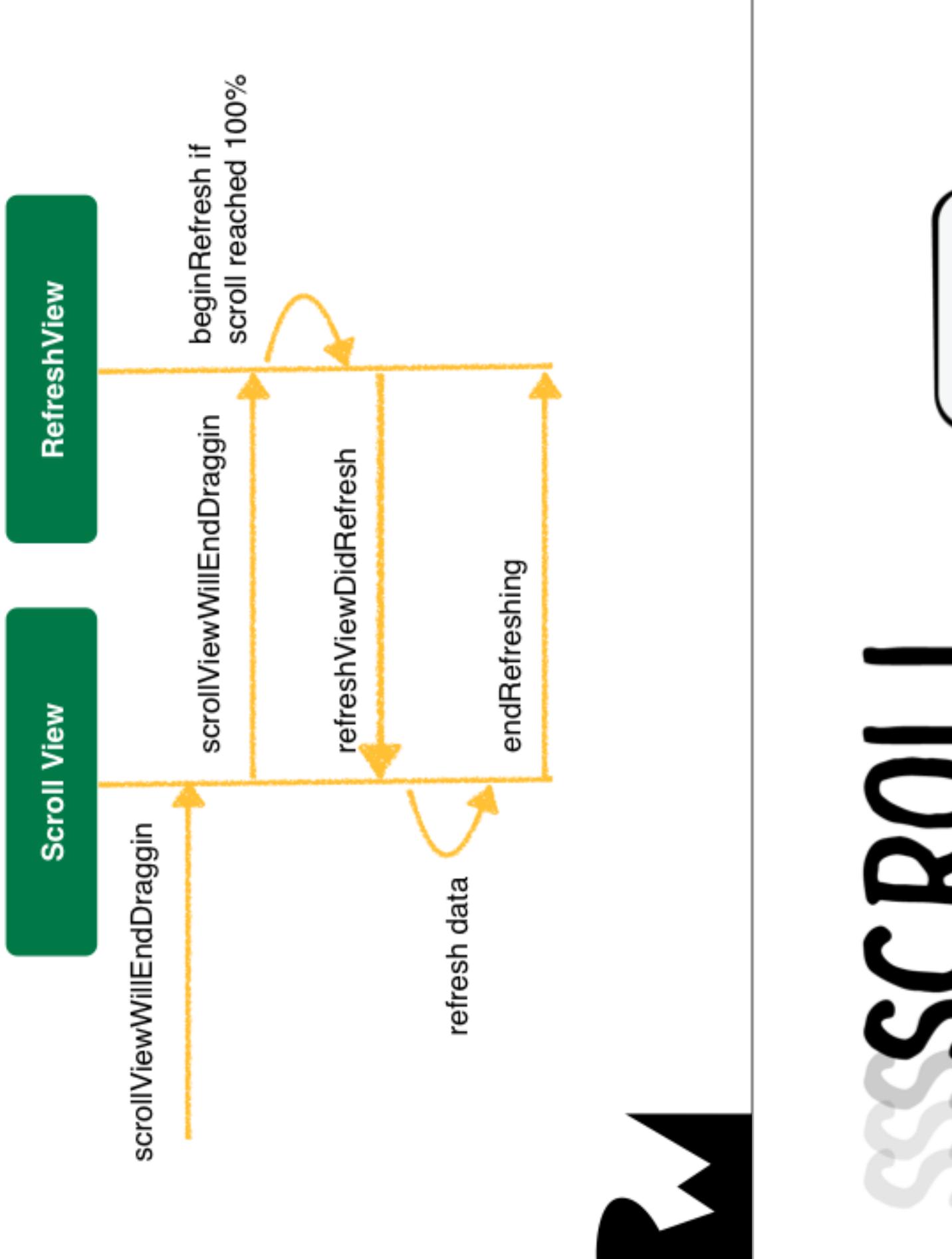


LOCKING AND REFRESHING



LOCKING AND REFRESHING

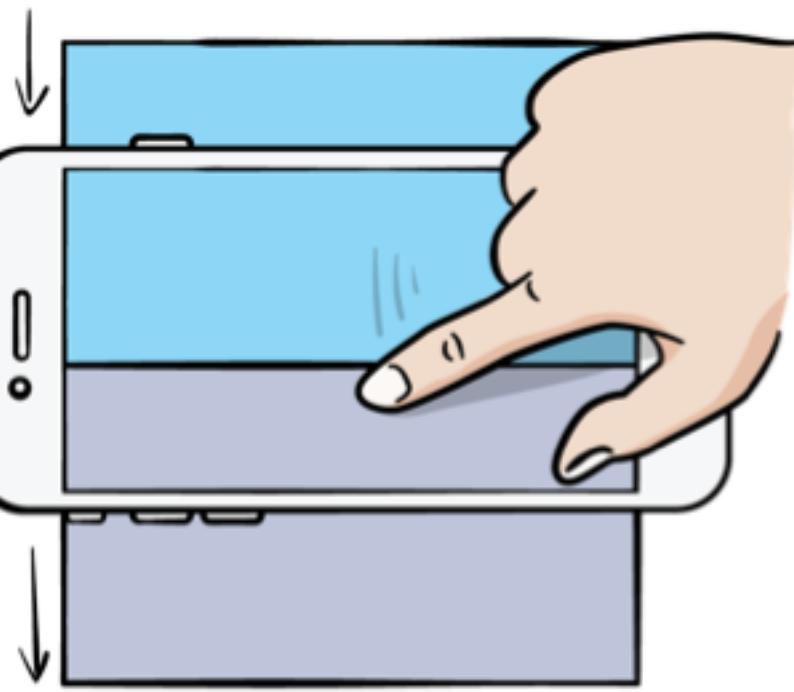




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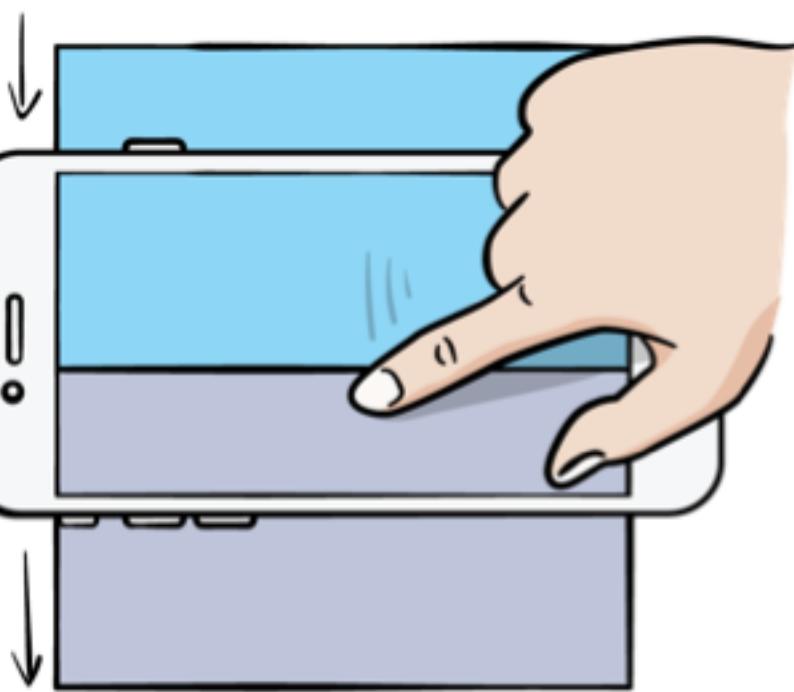
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FINISHING TOUCHES



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CONCLUSION