



Build Dynamic Paywalls using Backend Driven Development

Charlie Chapman • Do iOS • Nov 8, 2023



Developer Advocate
RevenueCat

RevenueCat



Indie Developer
Dark Noise



Host
Launched Podcast



The Problem

The advantages of web

- No waiting for App Review
- Can instantly update the UI
- Super easy to run A/B tests

Backend Driven UI

What is Backend Driven UI?

AKA Backend Driven Development

Driving your UI from the backend

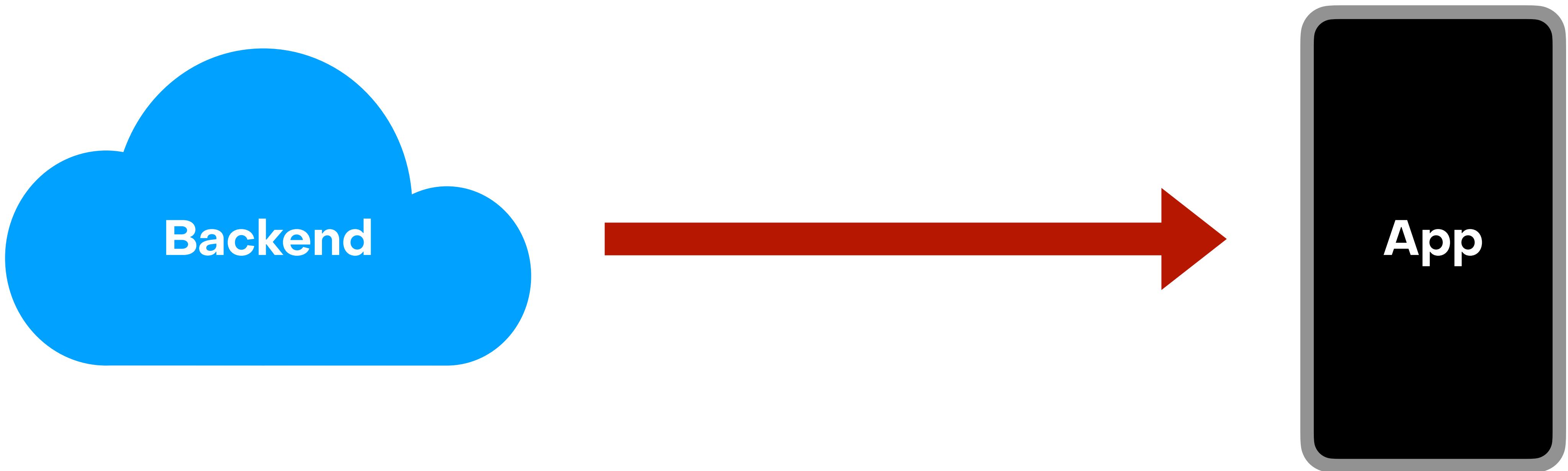
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Backend Driven UI Tradeoffs

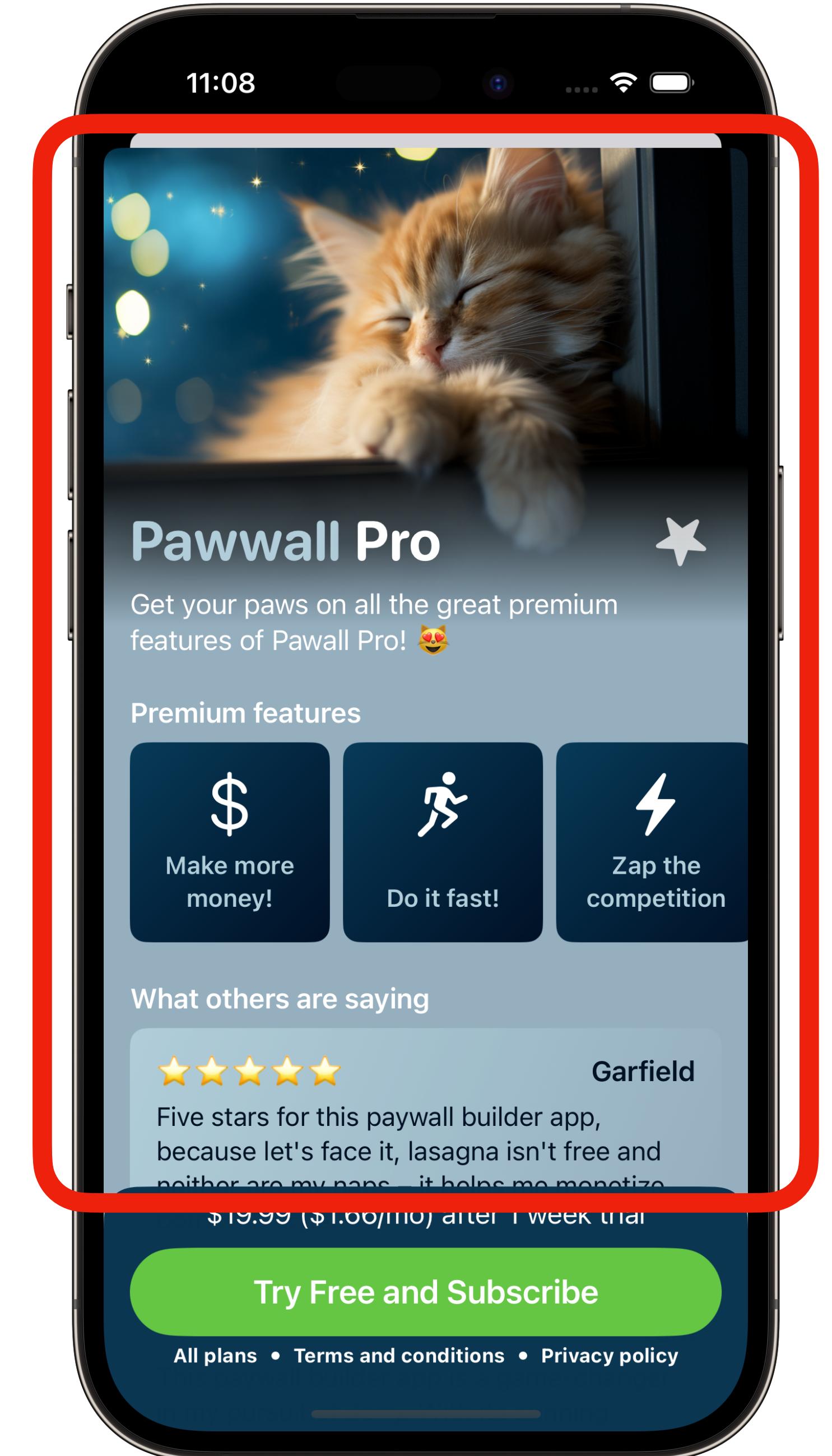
- More work
- More complicated
 - Need to keep a contract between back and front end
 - Think about old app versions
- More surface area for bugs
 - Backend change could break your layout

Paywalls

Paywalls

Marketing Section

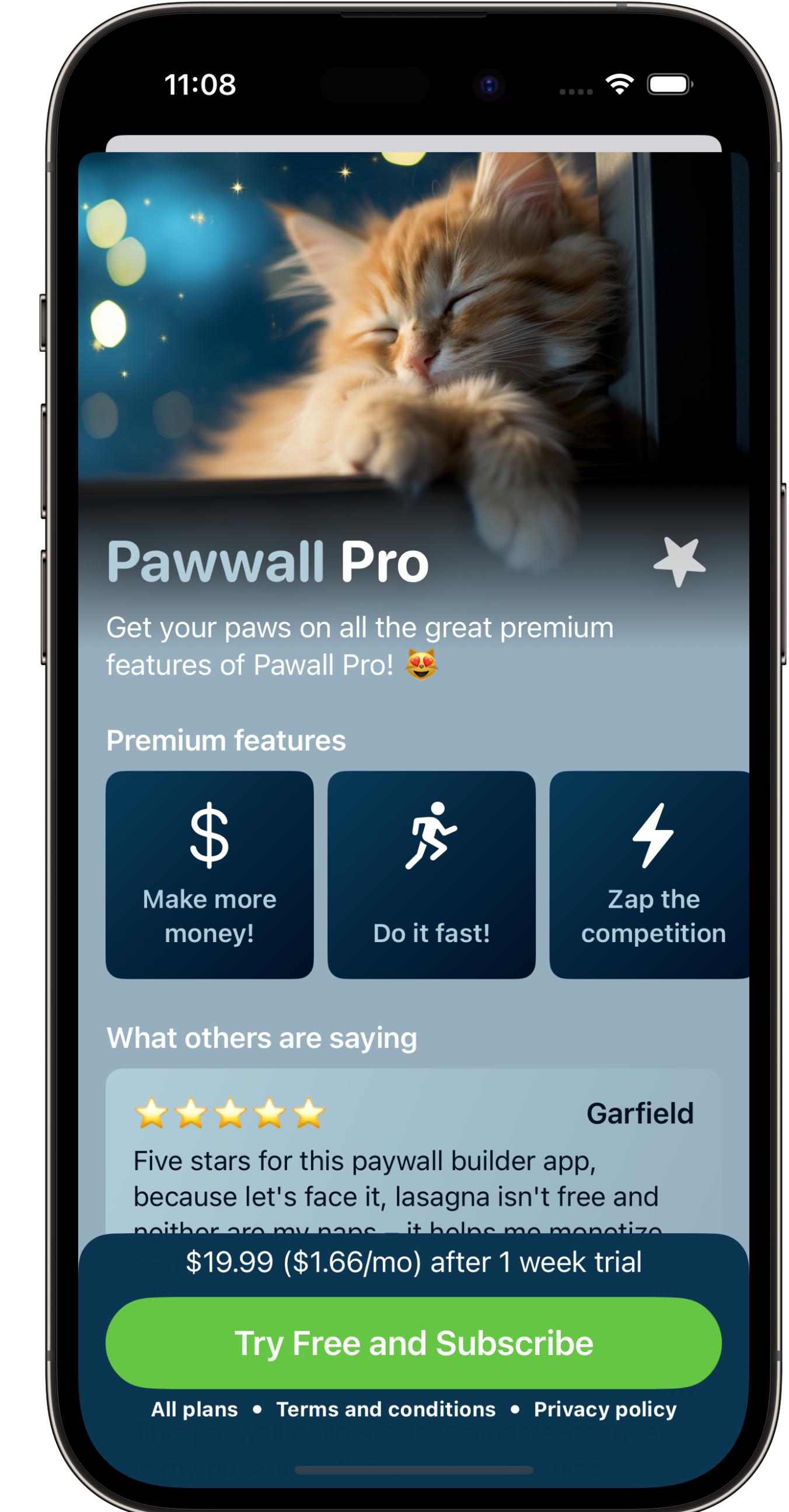
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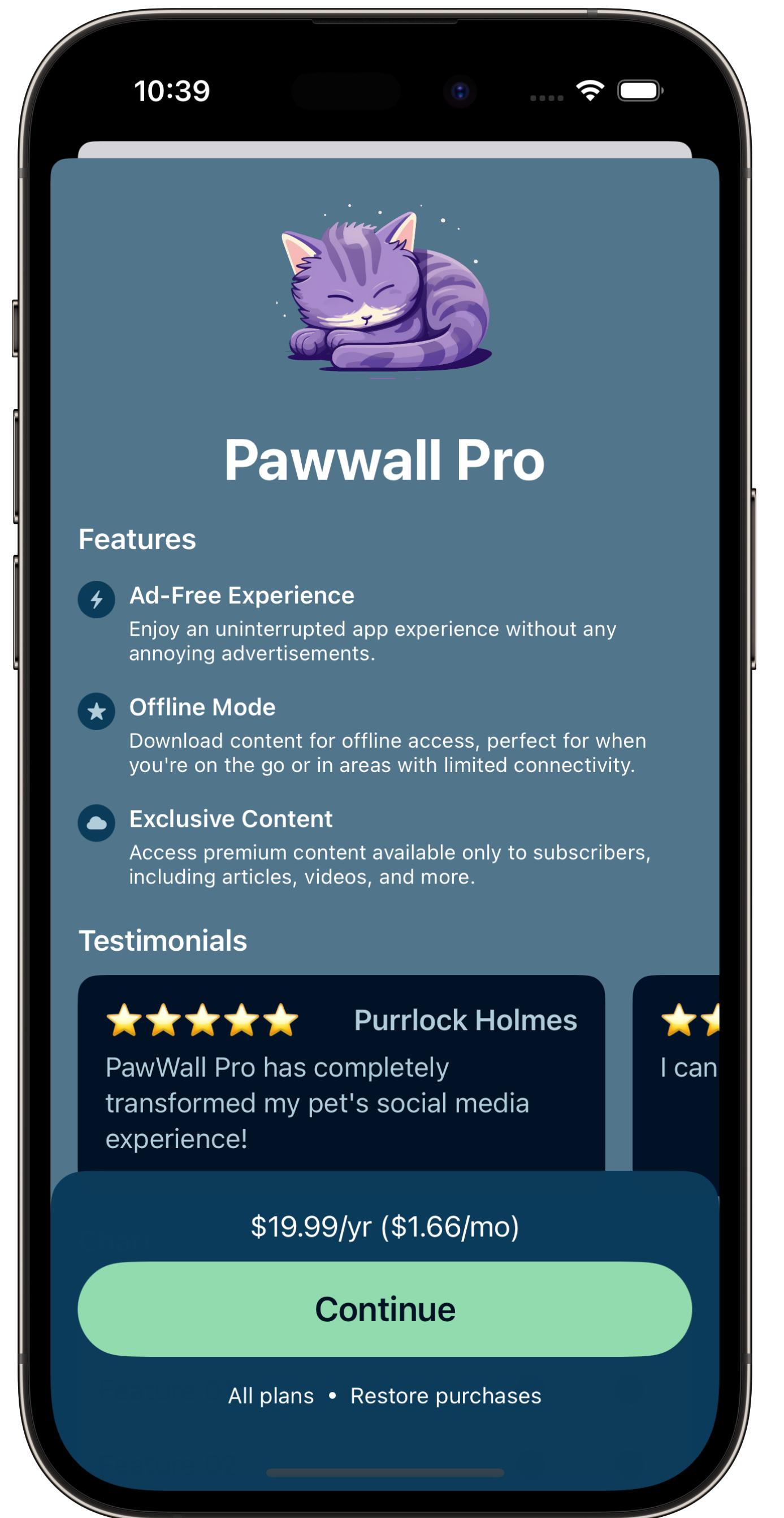
Paywalls

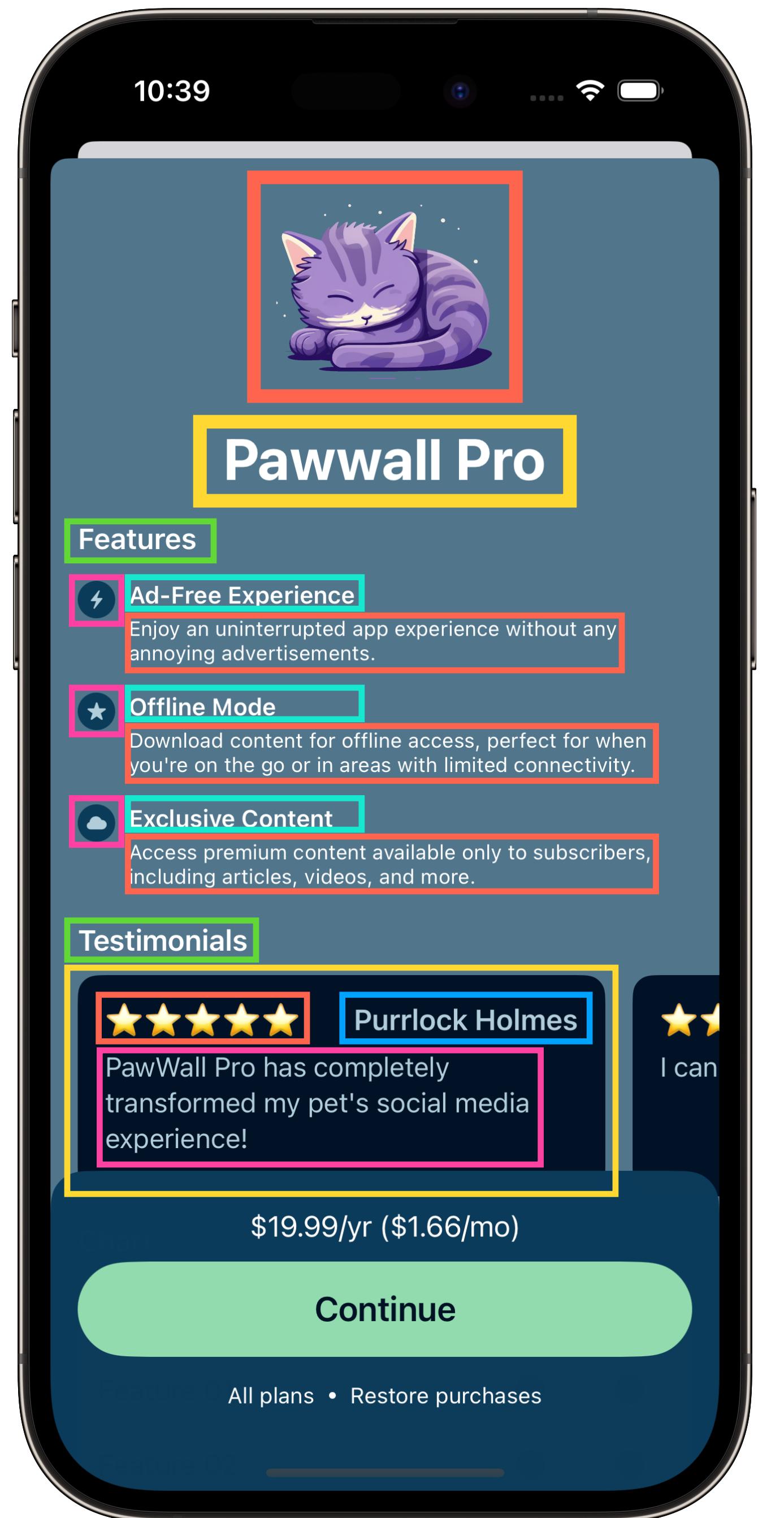
Marketing Section

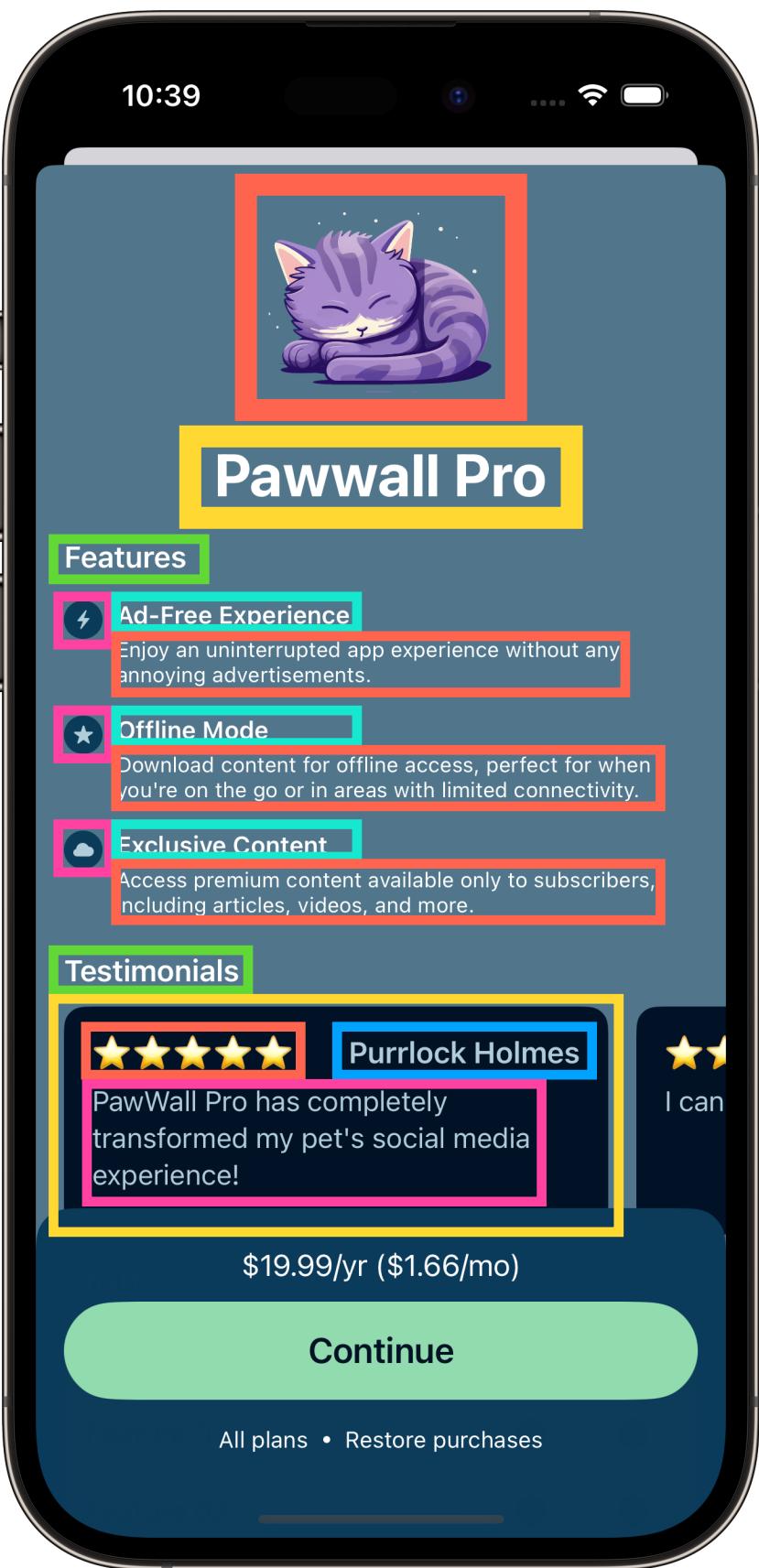
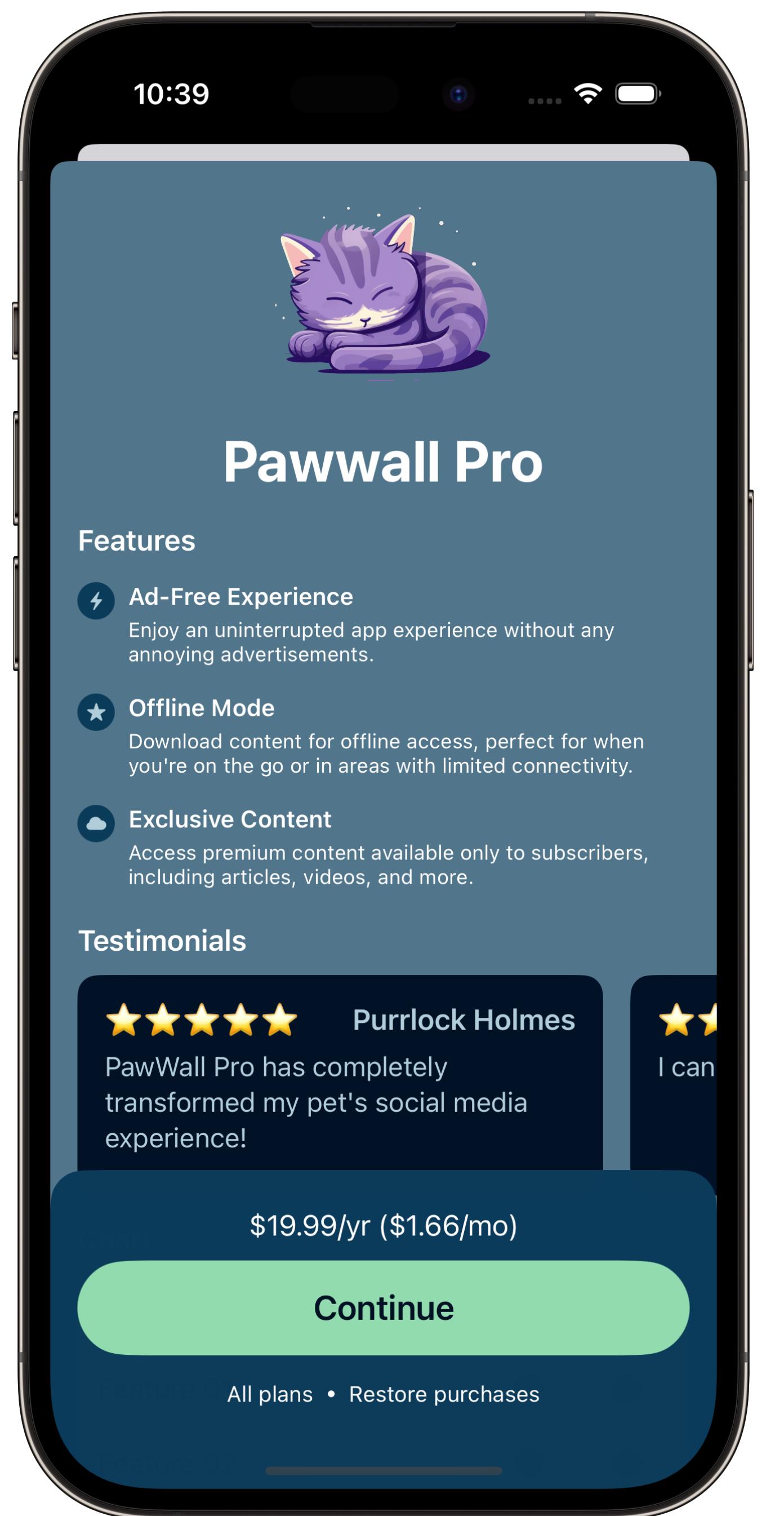
- Limited domain
- Simple
 - Doesn't need to be highly interactive
- Huge advantages to tweaking from backend
 - Experimentation
 - Limited time sales

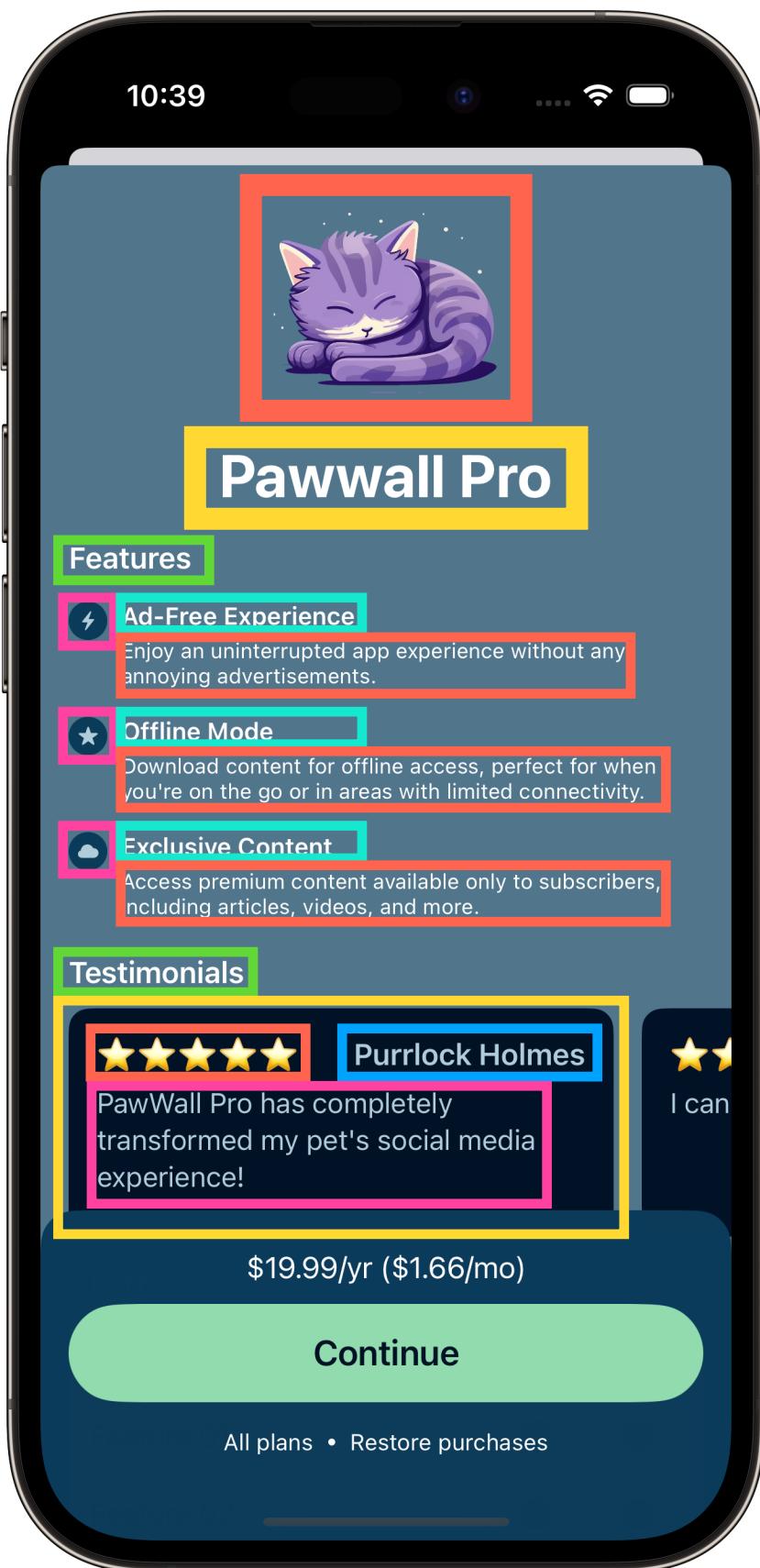
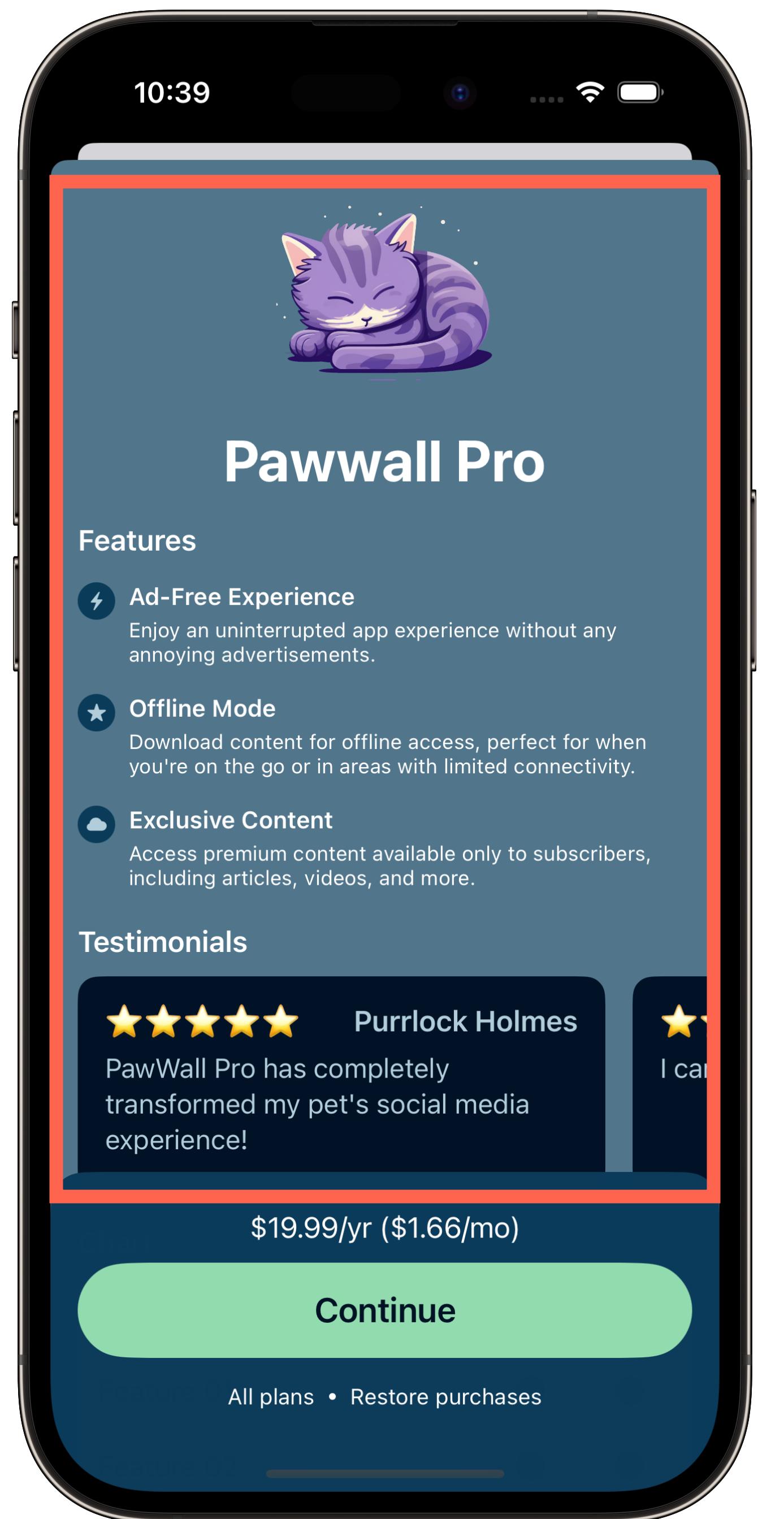


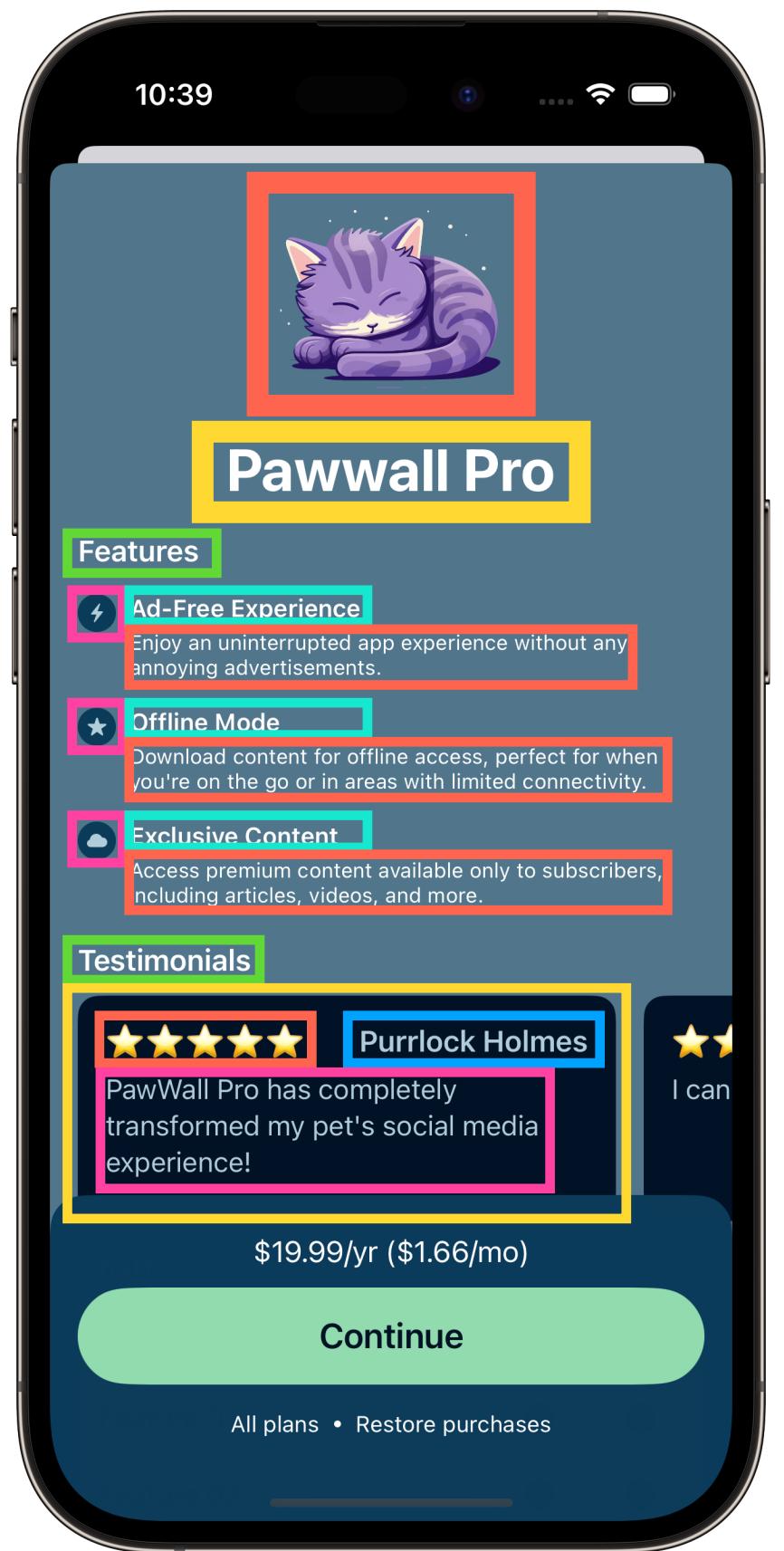
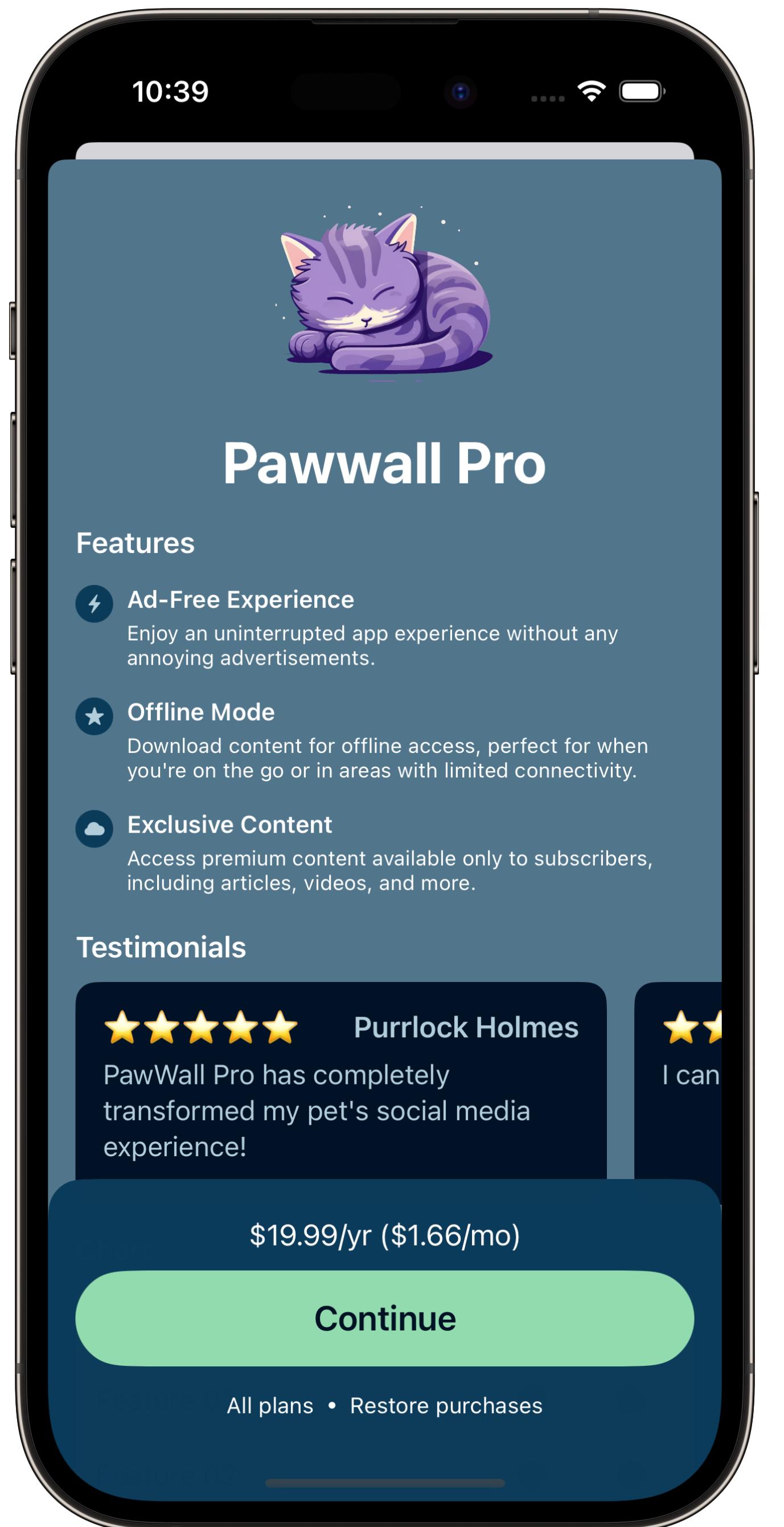
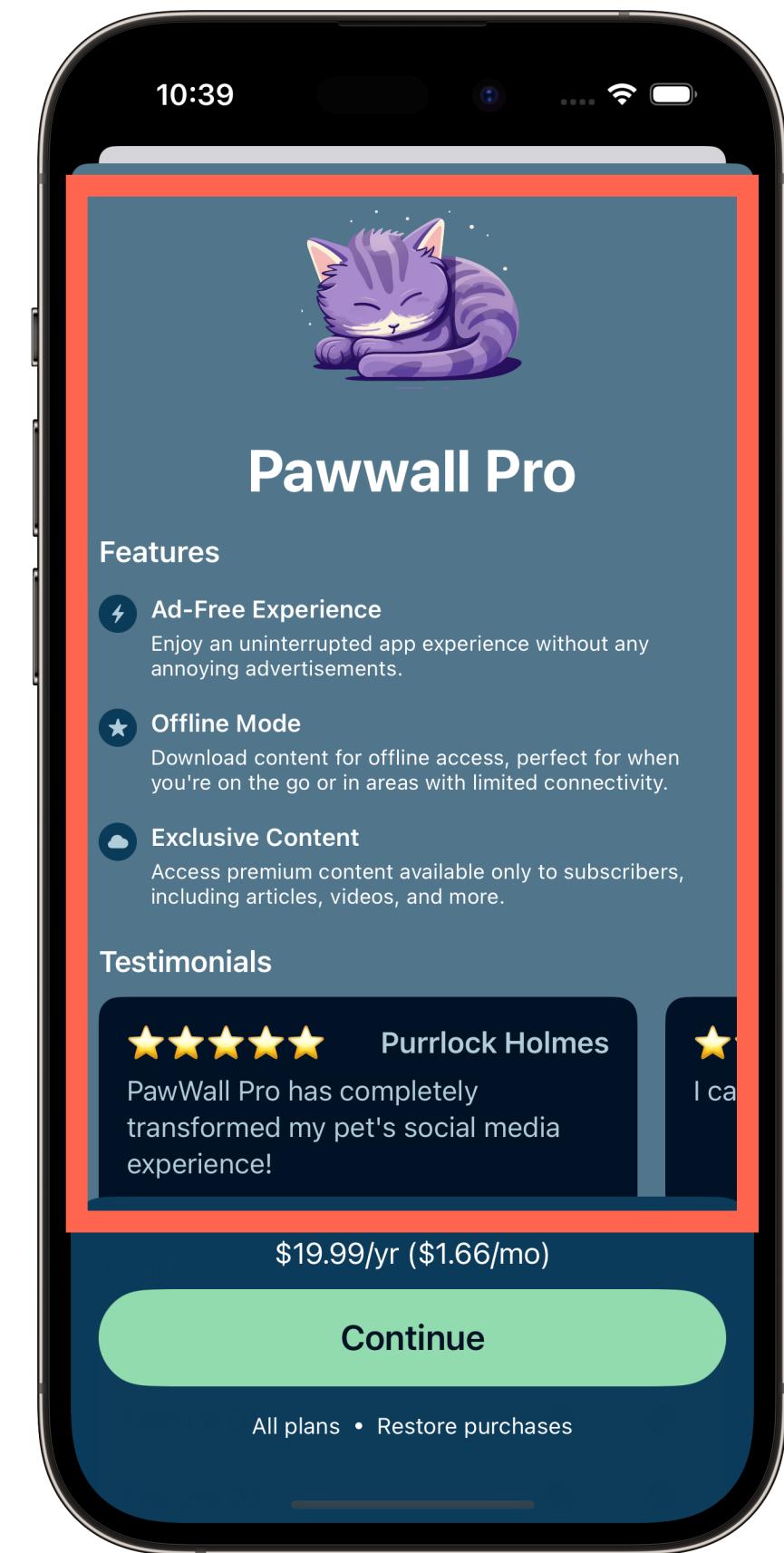
The Gradient of Backend Driven UI



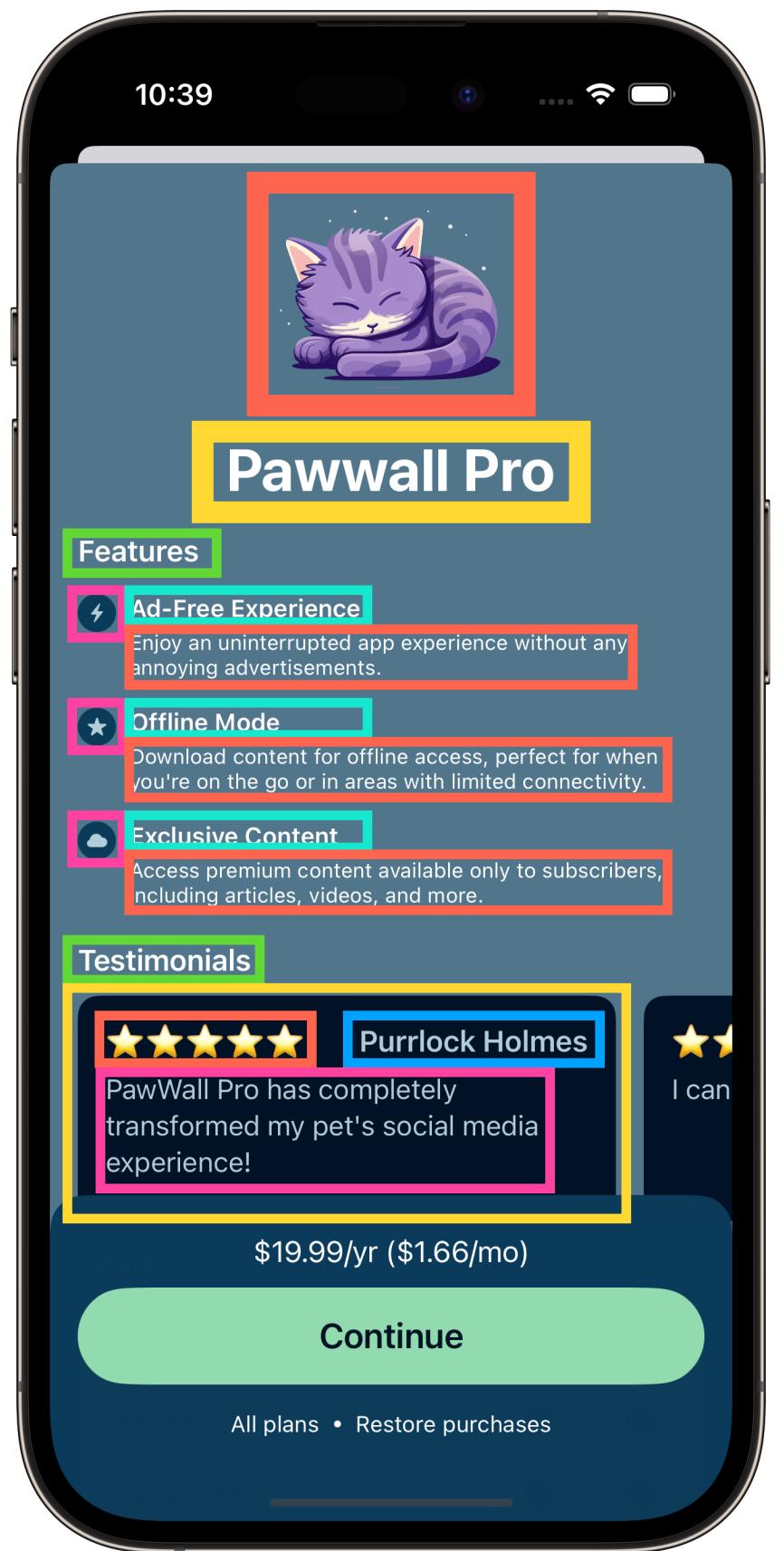
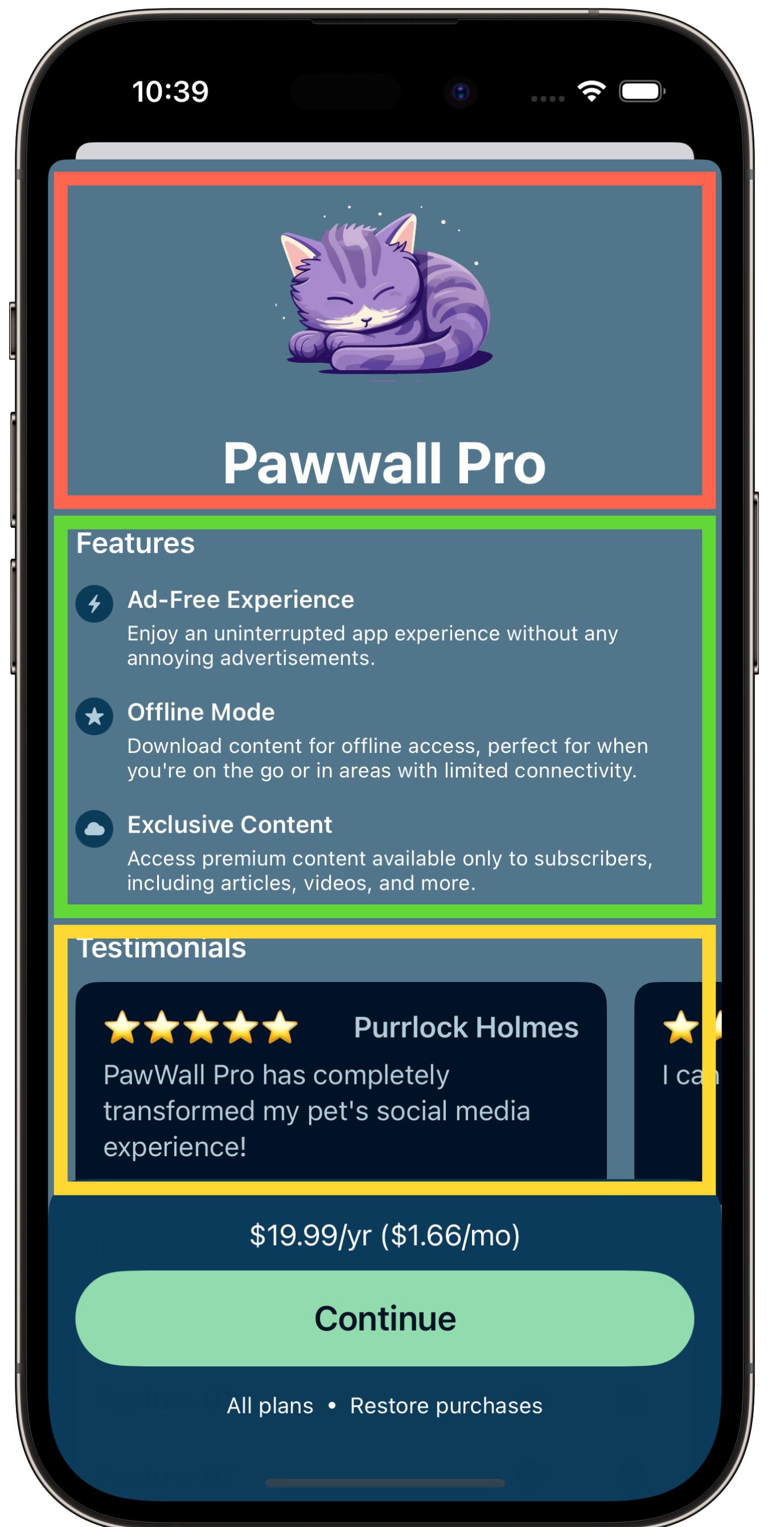
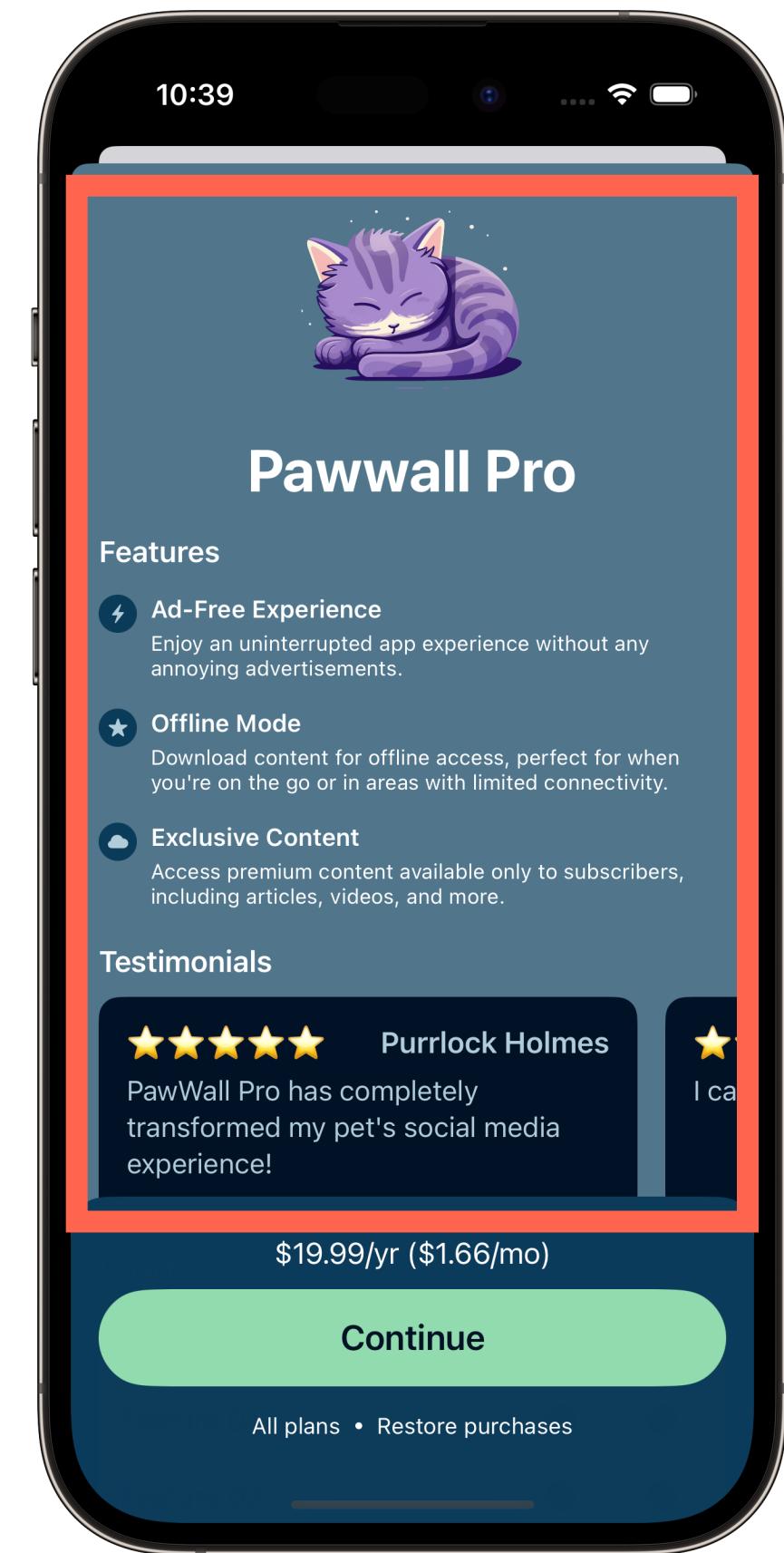




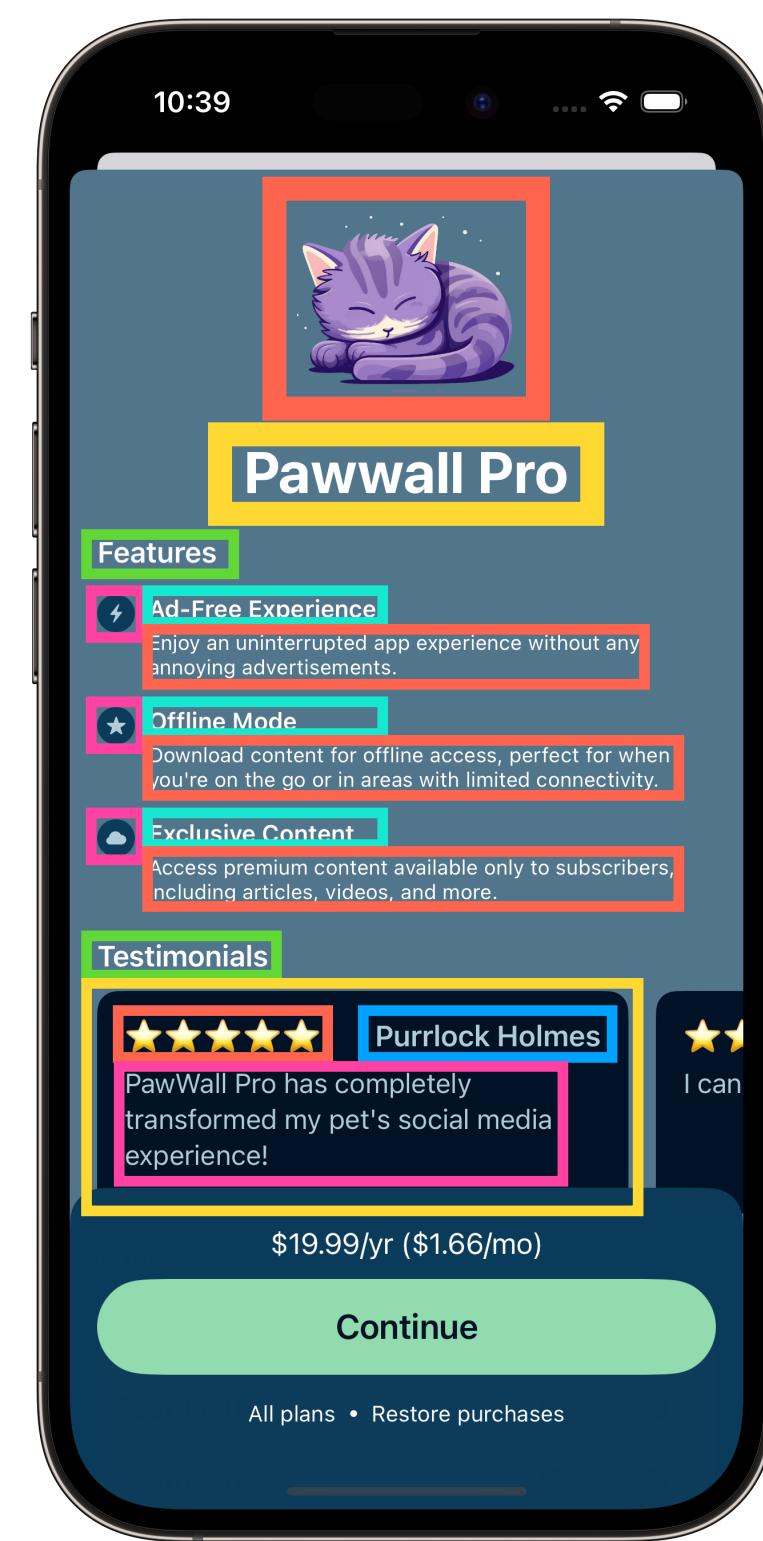
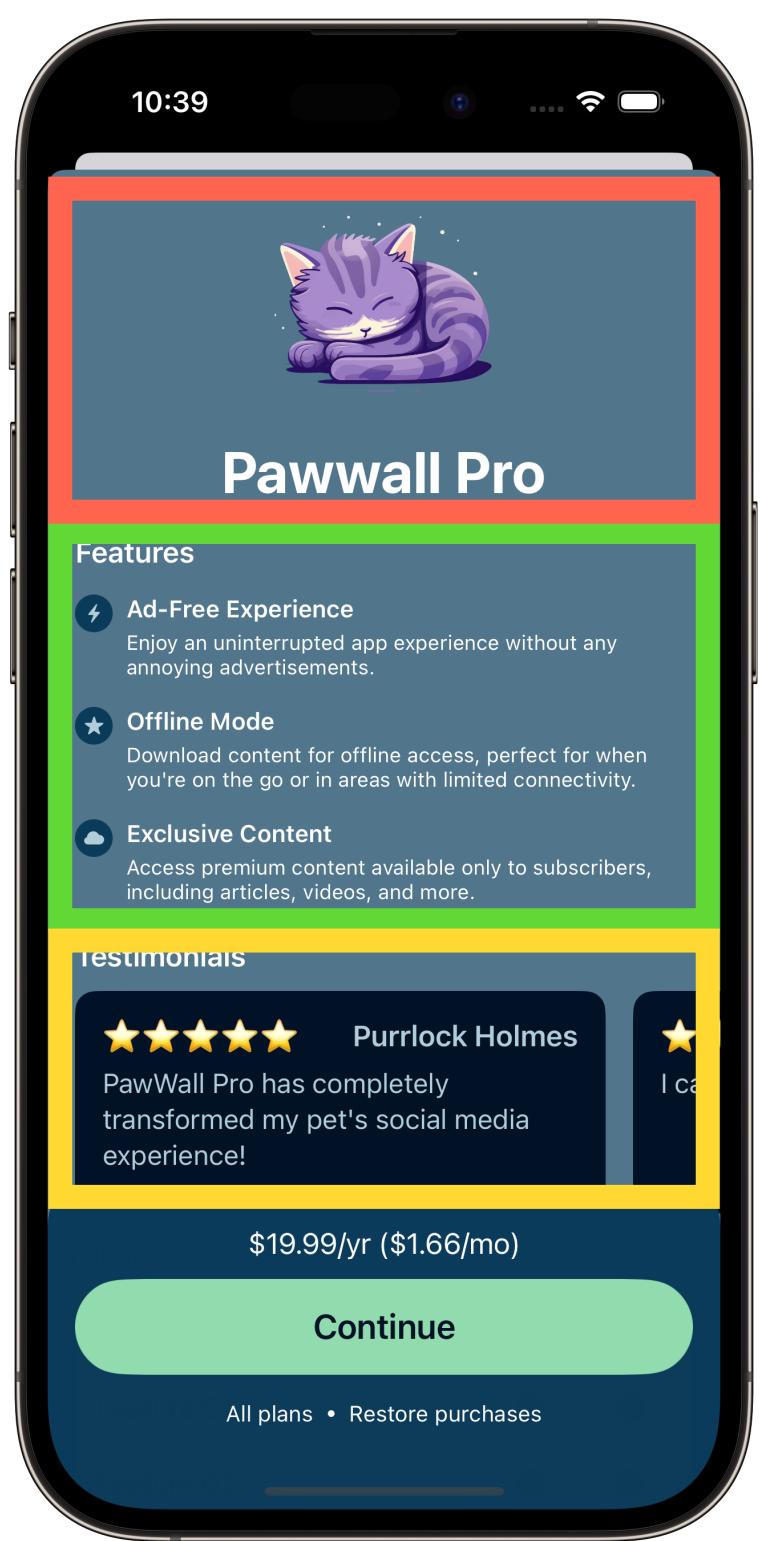
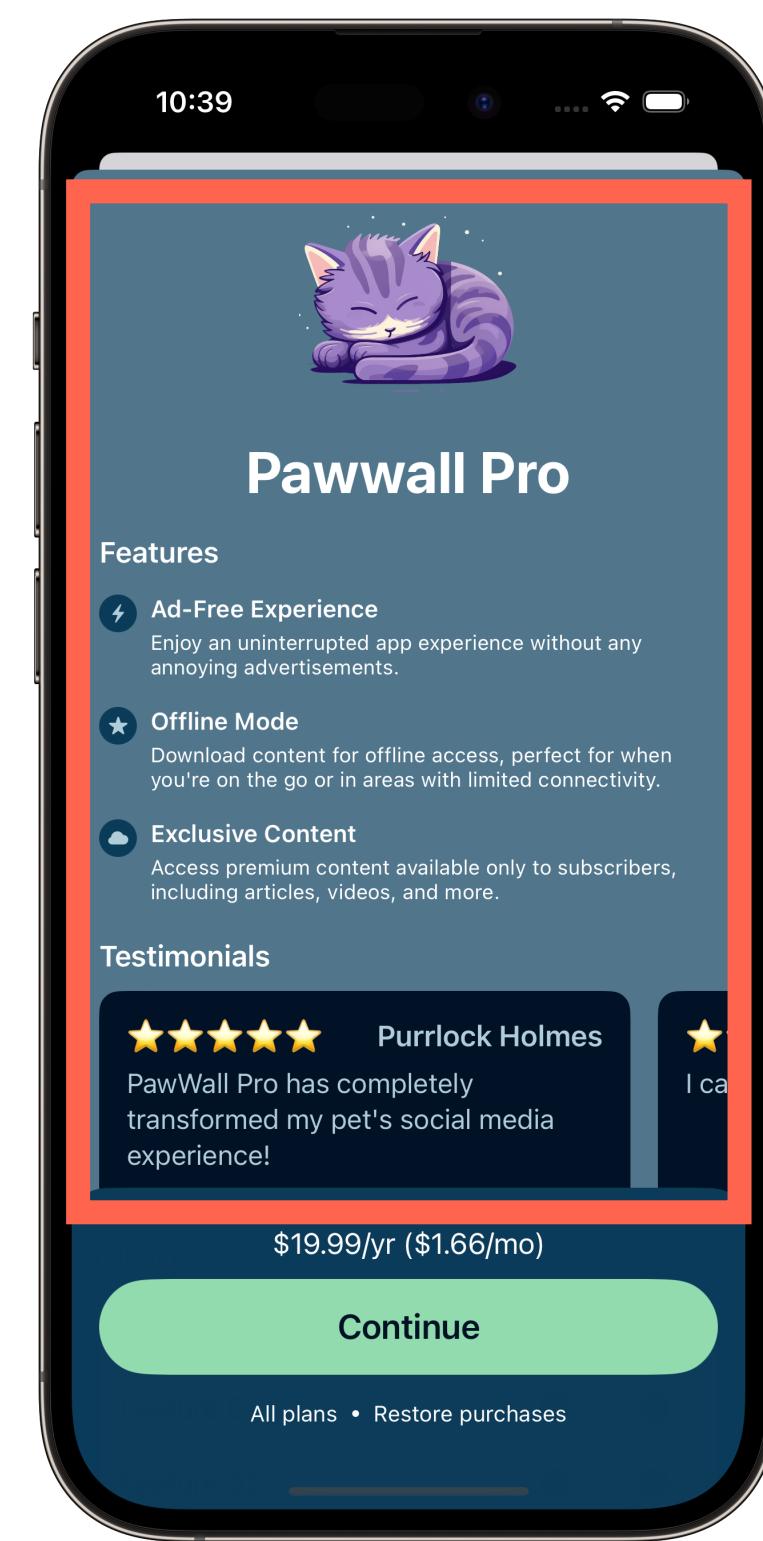




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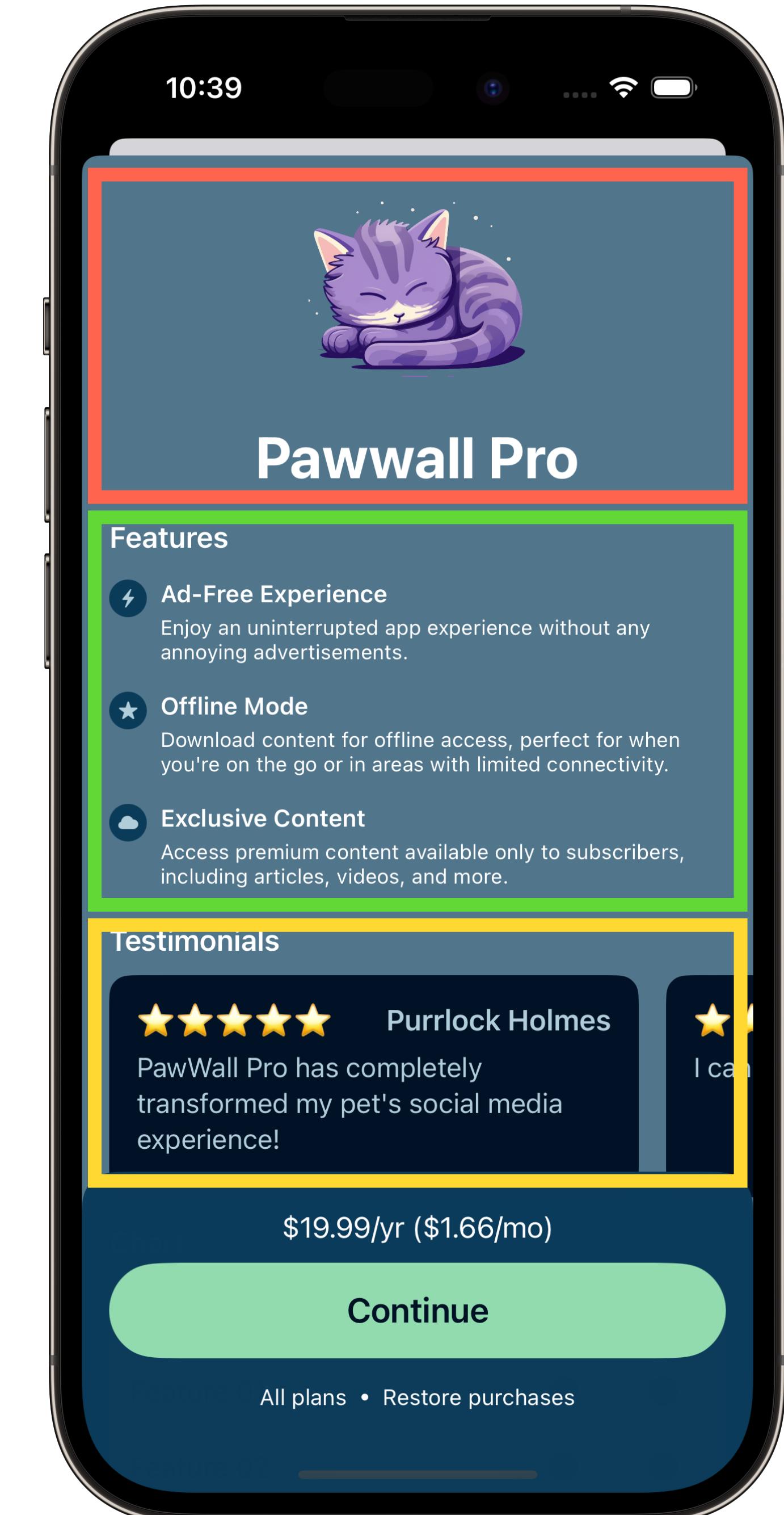


The Gradient of Backend Driven UI



The feed approach

- Break down UI into a vertically scrolling list of **modules**
- Modules are handcrafted, native code with **limited** set of inputs from the server
 - Text
 - List of items
 - Resist temptation to go overboard



Features Module

- Section header
- List of features
 - Name
 - Description
 - Image



Pawwall Pro

Features

Ad-Free Experience

Enjoy an uninterrupted app experience without any annoying advertisements.

Offline Mode

Download content for offline access, perfect for when you're on the go or in areas with limited connectivity.

Exclusive Content

Access premium content available only to subscribers, including articles, videos, and more.

Testimonials



Purrlock Holmes

PawWall Pro has completely transformed my pet's social media experience!



I can

Features Module

```
{  
  "title": String,  
  "features": [  
    {  
      "description": String,  
      "name": String,  
      "sfSymbol": String  
    }  
  ],  
}  
}
```

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Pawwall Pro

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Testimonials



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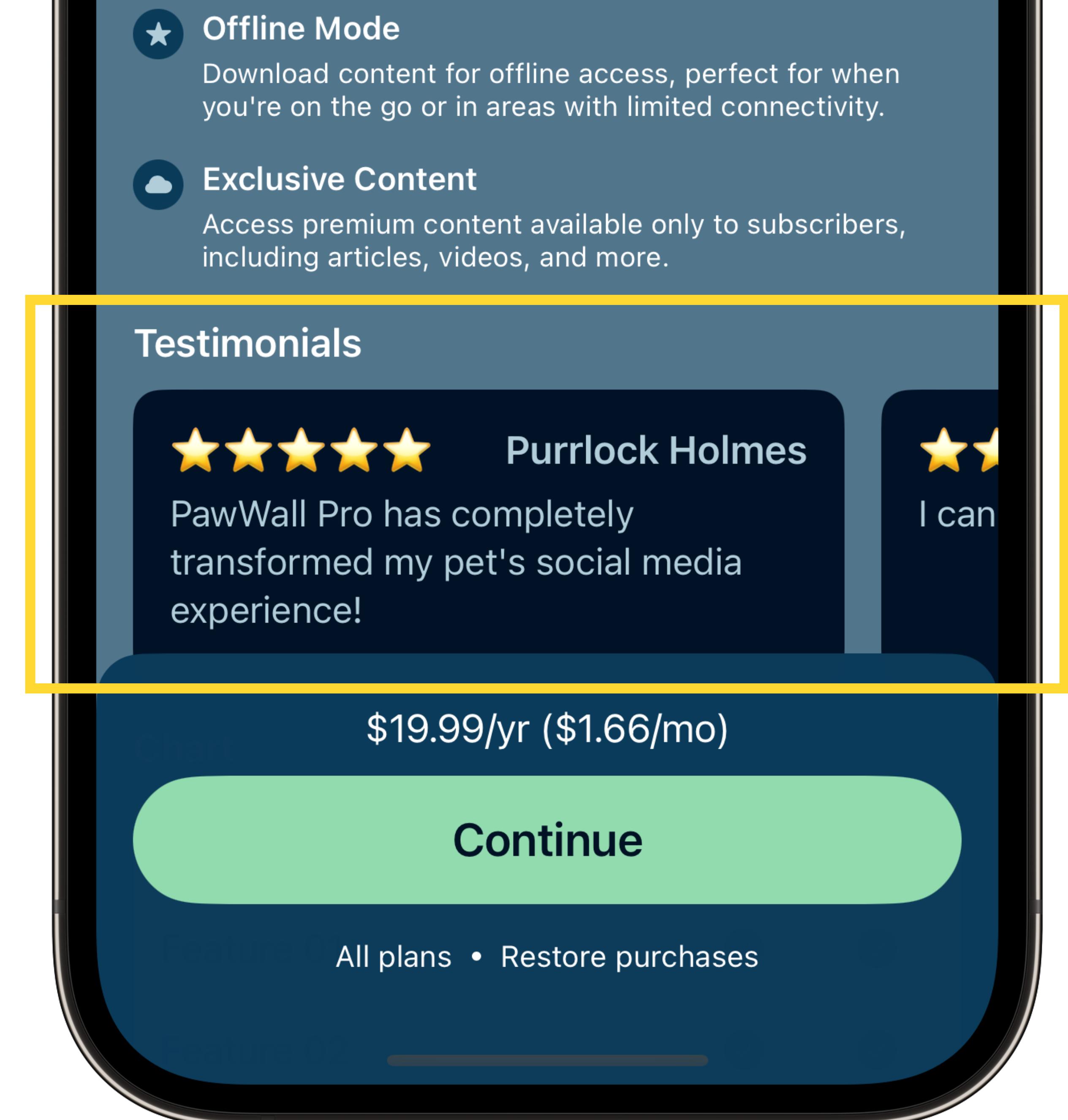
PawWall Pro has completely transformed my pet's social media experience!



I can

Testimonials Module

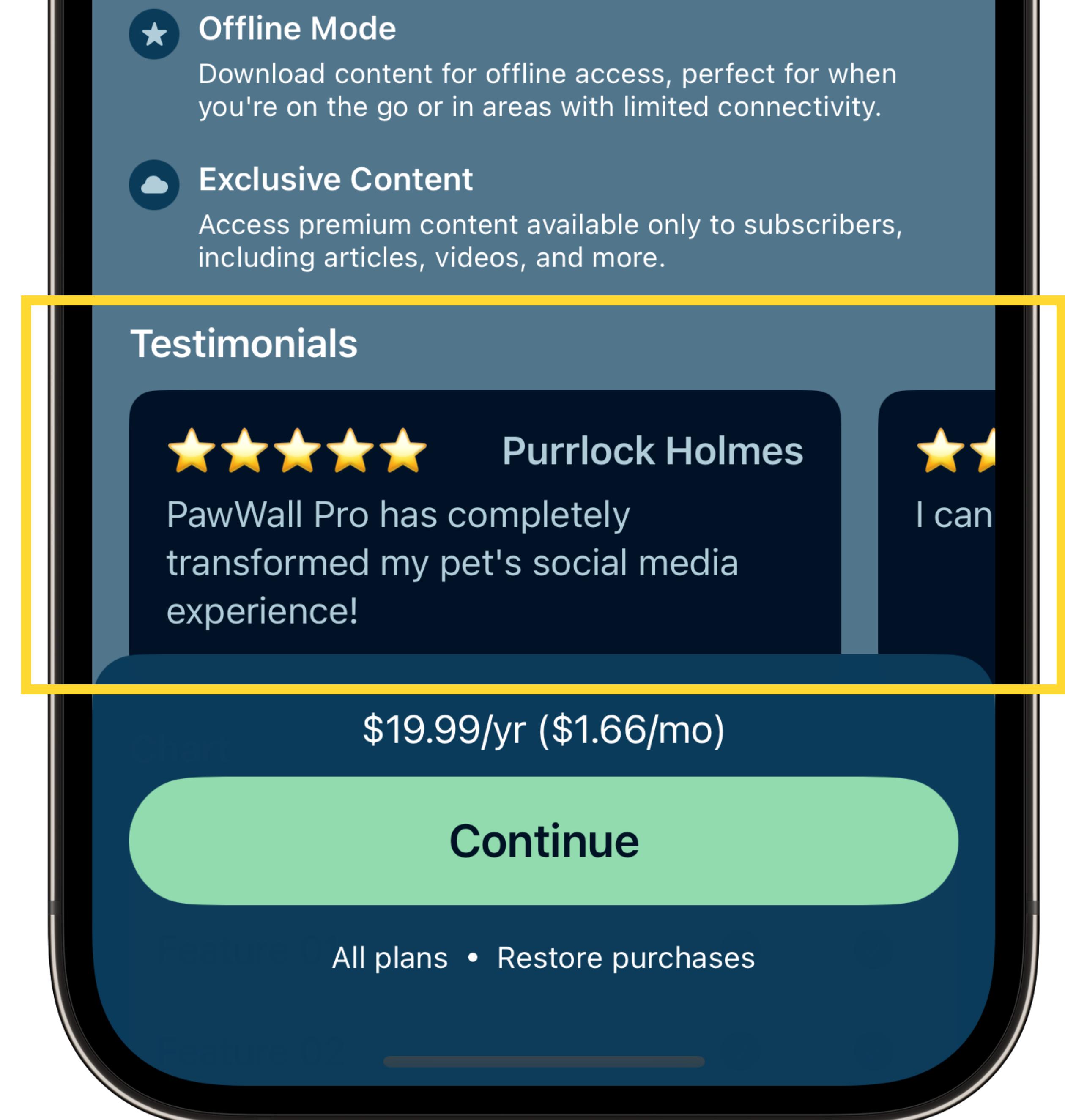
- Section header
- List of testimonials
 - Name
 - Review text



Testimonials Module

```
{  
  "title": String,  
  "testimonials": [  
    {  
      "description": String,  
      "name": String,  
      "sfSymbol": String  
    }  
  ],  
}
```

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Header Module

- Title
- Image URL

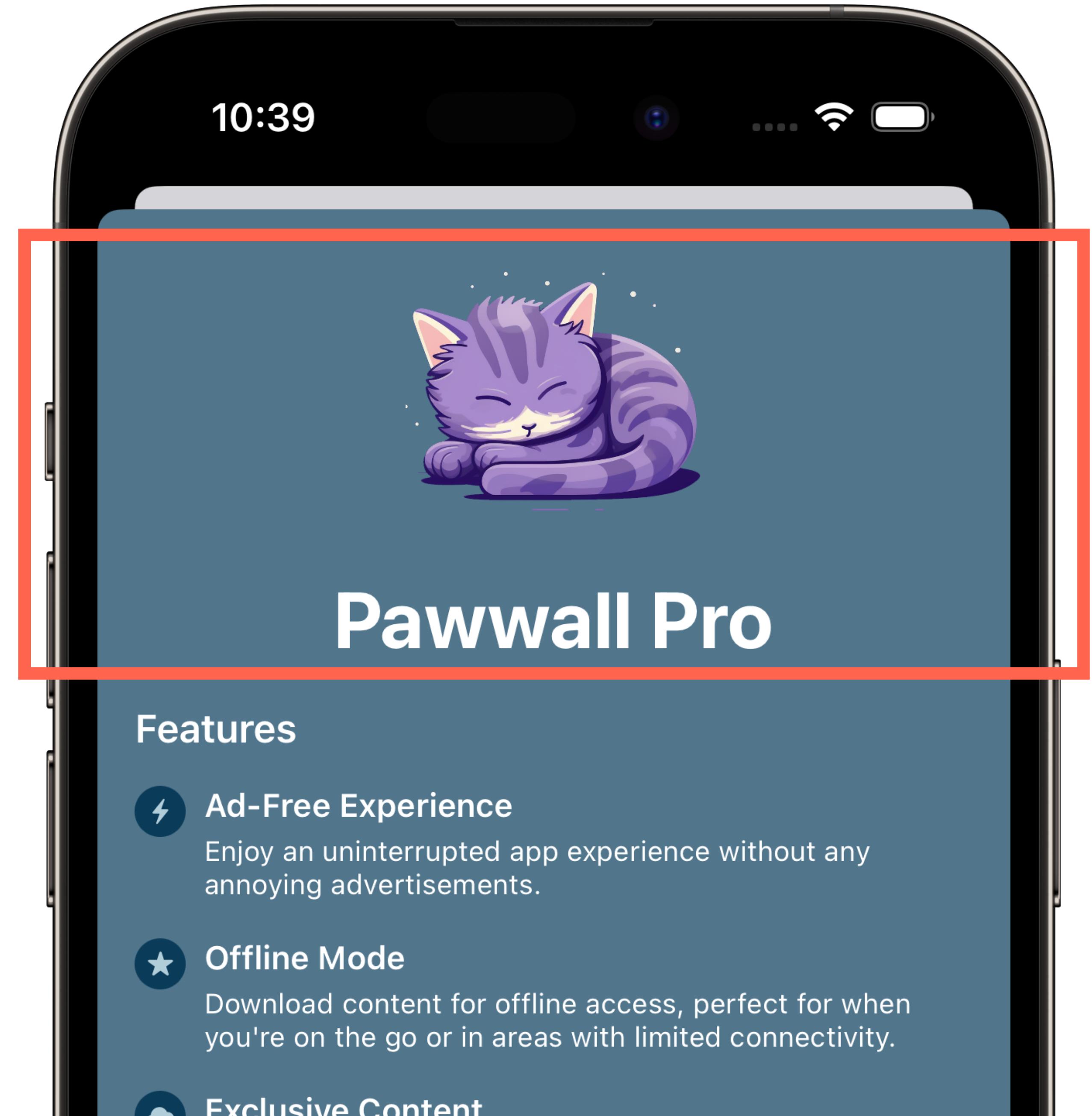


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Header Module

```
{  
  "title": String,  
  "imageURL": String  
}
```

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Demo

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More considerations

- Support for old app versions
 - Ignore module types your app doesn't recognize
- Be smart about nil/empty fields
- Localization
- Be careful of SF Symbols or local images
- Test environment

Configure your Template

Title:

Ignite your child's curiosity

Subtitle:

Get access to all our educational content trusted by thousands of parents

CTA for intro offer:

Redeem Your Free Week

Light mode colors:



Dark mode colors:



**Ignite your
child's curiosity**

Get access to all our educational content
trusted by thousands of parents

Redeem Your Free Week

Then \$9.99 every month

[Restore Purchases](#) • [Terms And Conditions](#)

NEW

RevenueCat Paywalls

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Questions?