

How to Build, Test, & Launch an App in the BigCommerce App Marketplace

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App Journey



What We'll Cover

- ◆ Ideation, Validation + MVP
- ♦ Building Your App
- ♦ Testing Your App
- ◆ Launching Your App







Ideation, Validation + MVP



Ideation

Purpose: To uncover potential app ideas if you don't already have them

- ◆ Brainstorming
- ◆ Ask:
 - What is missing from the market?
 - What pain points do merchants have?
 - What is ripe for disruption?

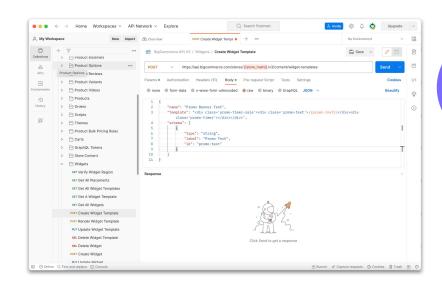




Validation

Purpose: To verify that there is a real demand & that it is technically feasible

- ♦ Critical Market validation
- ♦ Technical validation

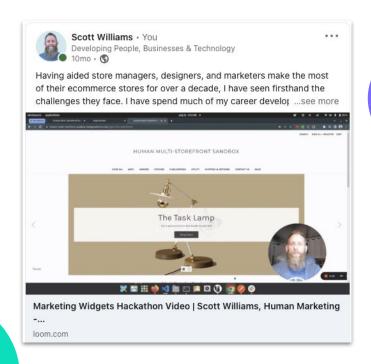




Minimum Viable Product (MVP)

Purpose: To gauge market response using a proof of concept

- ◆ Landing Page or Smoke Test
- Content Download
- Mockup or Prototype
- ◆ Custom Code / One-off Solution
- Proof of Concept





Build



Architecture

Purpose: To select a tech stack that suits your requirements

- ◆ Document functional & non-functional requirements
- ◆ Diagram interactions as early as possible
- ◆ Select a stack that meets current AND anticipated needs
- ◆ Tip Don't over-engineer your app too early



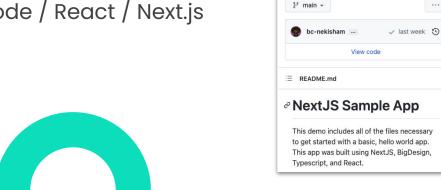


Architecture: Language / Framework

Purpose: To select programming language & framework that will facilitate

requirements & your teams processes

- Recommend sample apps / starter packages
- ◆ Building from scratch is educational but slow
- ♦ Key Options:
 - Most Actively Maintained Node / React / Next.js
 - PHP / LAMP
 - Ruby



()

□ bigcommerce / sample-app-nodejs

A reference implementation of a BigCommerce single-click app, in Node, JS + Next.is/React

<> Code ⊙ Issues 1 \$\gamma\gamma\ Pull requests ⊙ Ac

Watch ▼

☆ 41 stars \$ 240 forks - Activity

MIT license

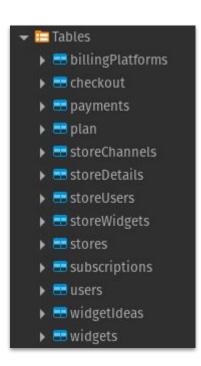


Architecture: Database

Purpose: To store account, user & application data

- ♦ Key step
- Key tables:
 - stores, users, storeUsers, storeChannels,
 storeDetails, subscriptions, plans, payments
- ♦ Top Options:
 - MySQL
 - PostgreSQL
 - Firebase or NoSQL Options

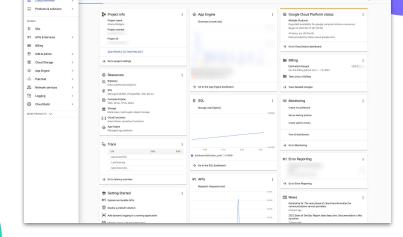




Architecture: Hosting

Purpose: To run your software in the cloud

- ◆ Frequently Asked Question You CANNOT run on BC servers
- ◆ App runs in an iframe (when accessed via BC Dashboard)
- ♦ Top Options:
 - Google Cloud (GAE, GCP, GKE)
 - AWS
 - Azure
 - Heroku
 - Linux VPS



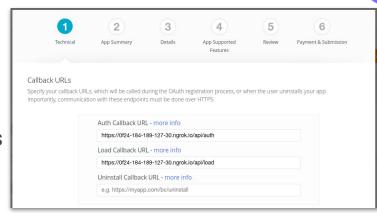
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Setup: App Listing

Purpose: To configure account & keys

- Need to be a BigCommerce Technology Partner
- ◆ Go to: Developer Portal https://devtools.bigcommerce.com/my/apps
- Must set:
 - Callback URLs
 - Scopes / Permissions
- ◆ Capture Client ID & Client Secret
- ◆ Tip Use Ngrok for initial Callback URLs





Dev: Oauth Authentication

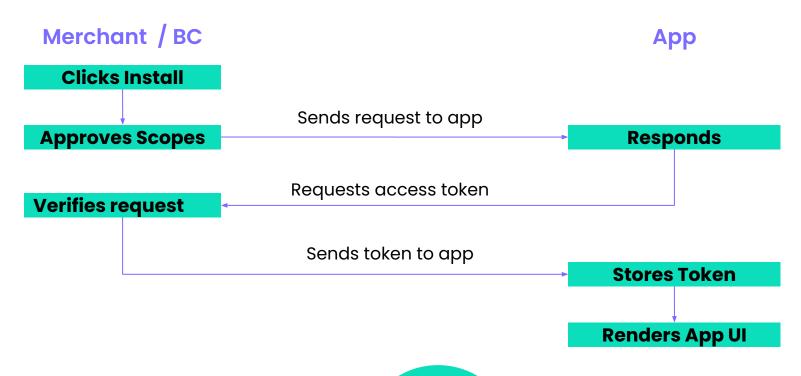
Purpose: To authenticate logged in BC users

- ♦ Must use Client ID & Client Secret in your environment variables
- ◆ For initial app install
- ◆ For login/load





Dev: Oauth Install Flow





Dev: Data Sync Modules

Purpose: To retain up-to-date data for app functionality

- ◆ Depends on your purposes
- ♦ Options:
 - Real time data fetch
 - On-demand or on-load sync
 - Batch sync in background (via CRON job)
 - Webhooks





Power User

Dev: Distributed Processing

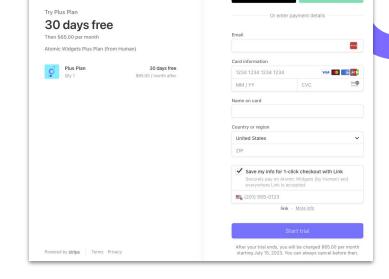
Purpose: To better handle events

- Pub/Sub, SQS, or similar allows you to better handle events that have longer-running and/or multiple handlers
- ◆ You can have multiple subscriptions (handlers) to single events
- ◆ Example:
 - On new install:
 - Trigger various data sync functions
 - Push notification to Slack
 - Send user(s) to email workflows

Dev: Payment Solution

Purpose: To capture one-time payments

- ◆ Frequently Asked Question You do not use BC Storefront Checkout
- ◆ Options:
 - Stripe
 - PayPal
 - BigCommerce Automated Billing (coming Q1 2024)
- ♦ Commissions to BigCommerce



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Pay with link ⇒

atomicwidgets



Prioritization

Purpose: To ensure you avoid waste & delays

- Focus on the most critical, functional elements of your application first
- ◆ Front load initiatives that will hold up other tasks
- ♦ Course correct as necessary
- ◆ Tip Don't forget about marketing





Helpful Tools & Tips

- ♦ Game Changer Ngrok
- Database Client
- ◆ BigDesign
- ◆ Tailwind CSS
- Postman (for building & testing)
- ◆ Tip Use Multiple App Store Listings (Dev, Staging, Production)
- ♦ Consider Pub/Sub or SQS for distributed event processing



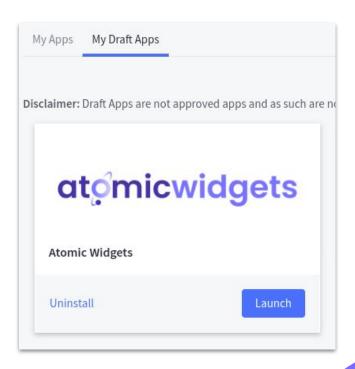


Test



How to Test

- Install your Draft App
 - From Dashboard > Apps
 - Owner account must be same as your Dev Portal account
- Use sandbox store
- Highly recommend Ngrok for hot reloading from local dev environment



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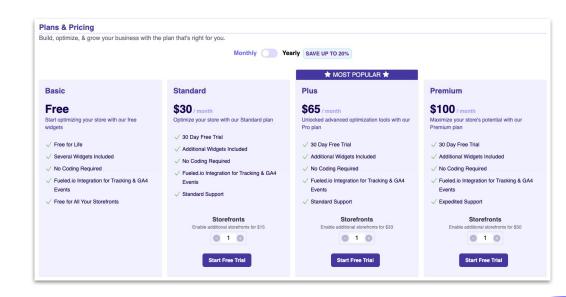
Test Functionality

- ◆ Tip Test early. Test often.
- Align testing to requirements
- ◆ Build Test Cases for structured testing plan
- Utilize regression testing. No assumptions.
- ♦ Consider unit testing.
- ♦ Involve (non-developer) users in testing process



Test Payments

- ◆ Trials
- Payments
- Plans + Feature Limiting
- ♦ Watch out for:
 - Multi-Storefront
 - Uninstall/Reinstall





Testing Scenarios

Purpose: To have a structured approach to testing

- ♦ Multiple Stores
- Multiple users
- ♦ Multi-Storefront
- **♦** B2B
- ◆ Active / Inactive Features
- Mom Tests
- ♦ Uninstall / Reinstall
- ◆ Don't Forget Using as Unintended

Launch



Pre-Submission Checks

- Ensure nothing is hard-coded or store specific
- ◆ Ensure proper install, load, new user, uninstall function via Oauth
- ★ Remember Use existing APIs wherever available
- ♦ Verify you are the latest v3 APIs
- ♦ Must support multiple users
- Maximize the embedded app (in the iframe)
- Fill out all partner portal details (including billing contact)
- ♦ Marketing site with Privacy Policy & Terms of Service
- Support documentation & contact form

App Listing Preparation

- Update Callback URLs with Product versions
- Verify Oauth scopes
- ★ Tip Write, helpful testing instructions
- ◆ Fill out profile (with Partner ID)
- Fill out App summary, logo/icons, & (only 1)
 category
- → Fill out details, features, screenshots
- ♦ Fill out policy & help guide links
- Select MSF compatibility











App Listing Submission

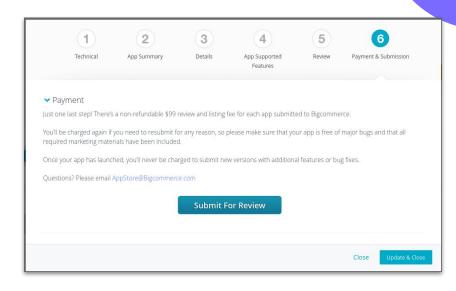
◆ After final testing & listing review, submit for review with \$99 fee

◆ You will NOT receive a confirmation email (though the listing status

will update to Pending)

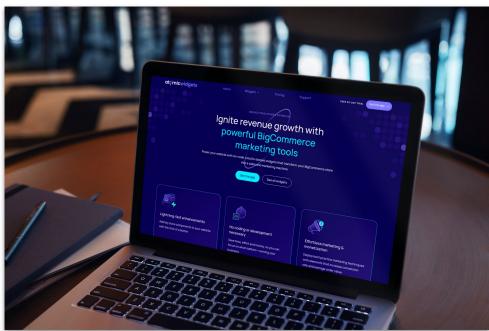
 It could be weeks before you hear back

- Team will respond via email with any edits/ questions
- Team will notify of pending launch once approved

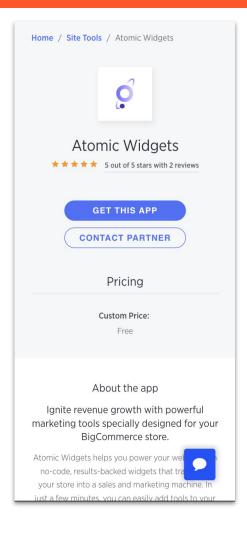




App Launched!







Resources



Helpful Resources

- BigCommerce Developer Documentation
- ♦ BigCommerce Technical Partner Registration
- Sample Apps
- ◆ App Submission Articles
 - How to land a spot in the BigCommerce App Marketplace
 - How to market your BigCommerce app
 - App Marketplace Best Practices (in Partner Portal)
- ♦ BC Developer Slack

Final Tips

- ◆ Beware that many stores will uninstall / reinstall your app. This can have unintended consequences
- Don't forget about marketing
- Key Highly recommend onboarding flows to orient your users. What is obvious to you, may not be to them.
- ◆ Set up email workflows that trigger on install / new user added
- ◆ Build Admin dashboards for easier management & support

Get in Touch

- Best LinkedIn: <u>@scottandrewwilliams</u>
- ♦ BC Dev Slack: Scott Williams Human
- ★ Twitter: <u>@ScottDeveloper</u>
- ◆ Atomic Widgets
 - Marketing Site: <u>AtomicWidgets.com</u>
 - Atomic Widgets App Listing:https://www.bigcommerce.com/apps/atomic-widgets/
- Human.Marketing

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Thank You

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