

MODULE 3

BUILDING YOUR TOOL

From Idea to Working MVP

"The way to get started is to quit talking and begin doing."

- Walt Disney

Student Name: _____

Tool Name: _____

Build Start Date: _____

Target Launch Date: _____

Module Progress Checklist

- ☐ Lesson 1: Tech Stack Selection
- ☐ Lesson 2: MVP Architecture Planning
- ☐ Lesson 3: Building Core Features
- ☐ Lesson 4: UI/UX Best Practices
- ☐ Lesson 5: Testing & Bug Fixing
- ☐ Lesson 6: Launch Day Preparation



QUICK WIN GENERATOR

Start building momentum TODAY:

Next 60 Minutes: Set up your development environment and push your first "Hello World" commit to GitHub.

☐ Environment ready and first commit done!

Pre-Build Assessment

My technical confidence level (1-10): _____

Hours per day I can dedicate to building: _____

My biggest technical challenge will be:

Tech Stack Decision Tree

FRONTEND SELECTION

Option A: Simple Stack

- ☐ HTML/CSS/Vanilla JS
- ☐ Bootstrap/Tailwind
- ☐ jQuery (if needed)

✓ Best for: Conversion tools, calculators

Option B: Modern Stack

- ☐ React/Vue/Svelte
- ☐ Next.js/Nuxt
- ☐ TypeScript

✓ Best for: Complex interactions, dashboards

BACKEND SELECTION

Option A: Serverless

- ☐ Vercel/Netlify Functions
- ☐ Supabase/Firebase
- ☐ AWS Lambda

✓ Best for: Low maintenance, scale automatically

Option B: Traditional

- ☐ Node.js/Express
- ☐ Python/Django
- ☐ Ruby on Rails

✓ Best for: Complex logic, full control

MY FINAL STACK DECISION

| COMPONENT | TECHNOLOGY CHOICE | WHY |
|--------------------|-------------------|-----|
| Frontend Framework | | |
| Backend/API | | |
| Database | | |
| Hosting | | |
| Payment Processing | | |

MVP Feature Checklist

CORE FEATURES (MUST HAVE FOR LAUNCH)

☐ Feature 1: _____

Estimated time: _____ hours | Actual: _____ hours

☐ Feature 2: _____

Estimated time: _____ hours | Actual: _____ hours

☐ Feature 3: _____

Estimated time: _____ hours | Actual: _____ hours

☐ Feature 4: _____

Estimated time: _____ hours | Actual: _____ hours

☐ Feature 5: _____

Estimated time: _____ hours | Actual: _____ hours

INFRASTRUCTURE REQUIREMENTS

☐ User authentication system

☐ Database schema designed

☐ Payment integration

☐ Email notifications

☐ Basic analytics tracking

☐ Error handling & logging

☐ Basic security measures

NICE-TO-HAVE FEATURES (POST-LAUNCH)

1. _____

2. _____

3. _____

4. _____

5. _____

💡 **PRO TIP**

If a feature takes more than 8 hours to build, it's not an MVP feature. Save it for v2!

14-Day Development Sprint

Day 1-2
Setup

Day 3-5
Backend

Day 6-8
Frontend

Day 9-11
Integration

Day 12-14
Testing

WEEK 1: FOUNDATION

| DAY | TASK | COMPLETED | NOTES |
|-------|-------------------------------------|--------------------------|-------|
| Day 1 | Set up dev environment, GitHub repo | <input type="checkbox"/> | |
| Day 2 | Database design, initial schema | <input type="checkbox"/> | |
| Day 3 | Authentication system | <input type="checkbox"/> | |
| Day 4 | Core backend logic (Feature 1) | <input type="checkbox"/> | |
| Day 5 | Core backend logic (Feature 2) | <input type="checkbox"/> | |
| Day 6 | Frontend setup, routing | <input type="checkbox"/> | |
| Day 7 | Main UI components | <input type="checkbox"/> | |

WEEK 2: INTEGRATION & POLISH

| DAY | TASK | COMPLETED | NOTES |
|--------|-----------------------------|--------------------------|-------|
| Day 8 | Frontend forms, user flows | <input type="checkbox"/> | |
| Day 9 | Connect frontend to backend | <input type="checkbox"/> | |
| Day 10 | Payment integration | <input type="checkbox"/> | |
| Day 11 | Email notifications | <input type="checkbox"/> | |
| Day 12 | Testing & bug fixes | <input type="checkbox"/> | |
| Day 13 | Performance optimization | <input type="checkbox"/> | |

| DAY | TASK | COMPLETED | NOTES |
|--------|--------------------------------|--------------------------|-------|
| Day 14 | Final testing, deployment prep | <input type="checkbox"/> | |

UI/UX Sketching Templates

HOMEPAGE WIREFRAME

[Sketch your homepage layout here]

Include: Header, Hero, Features, CTA, Footer

MAIN APPLICATION SCREEN

[Sketch your main app interface here]

Include: Navigation, Main action area, Sidebar (if needed)

MOBILE RESPONSIVE VIEW

[Mobile View]

[Tablet View]

Essential Code Snippets

AUTHENTICATION BOILERPLATE

```
// Your auth setup code here
```

STRIPE INTEGRATION

```
// Payment processing setup
```

API ENDPOINTS

| METHOD | ENDPOINT | PURPOSE | STATUS |
|--------|--------------------|-------------------|--------------------------|
| POST | /api/auth/register | User registration | <input type="checkbox"/> |
| POST | /api/auth/login | User login | <input type="checkbox"/> |
| GET | /api/user/profile | Get user data | <input type="checkbox"/> |
| | | | <input type="checkbox"/> |
| | | | <input type="checkbox"/> |

ENVIRONMENT VARIABLES

```
DATABASE_URL=
STRIPE_SECRET_KEY=
STRIPE_PUBLIC_KEY=
JWT_SECRET=
```

EMAIL_API_KEY= _____

ANALYTICS_ID= _____

Testing Checklist

FUNCTIONALITY TESTING

- ☐ User can register successfully
- ☐ User can login/logout
- ☐ Password reset works
- ☐ Core feature #1 works as expected
- ☐ Core feature #2 works as expected
- ☐ Core feature #3 works as expected
- ☐ Payment processing successful
- ☐ Email notifications sent correctly

CROSS-BROWSER TESTING

- ☐ Chrome (Desktop)
- ☐ Firefox (Desktop)
- ☐ Safari (Desktop)
- ☐ Chrome (Mobile)
- ☐ Safari (iOS)

PERFORMANCE CHECKLIST

- ☐ Page load time < 3 seconds
- ☐ Mobile responsive on all screens
- ☐ Images optimized
- ☐ Database queries optimized
- ☐ Caching implemented

SECURITY CHECKLIST

- ☐ SSL certificate installed
- ☐ Input validation on all forms
- ☐ SQL injection prevention

☐ XSS protection enabled

☐ Sensitive data encrypted

Bug Tracking Log

| DATE | BUG DESCRIPTION | SEVERITY | STATUS | FIXED |
|------|-----------------|----------|--------|--------------------------|
| | | Critical | | <input type="checkbox"/> |
| | | Major | | <input type="checkbox"/> |
| | | Minor | | <input type="checkbox"/> |
| | | | | <input type="checkbox"/> |
| | | | | <input type="checkbox"/> |
| | | | | <input type="checkbox"/> |
| | | | | <input type="checkbox"/> |
| | | | | <input type="checkbox"/> |

COMMON ISSUES & SOLUTIONS

Issue 1: _____

Solution: _____

Issue 2: _____

Solution: _____

Issue 3: _____

Solution: _____

PRO TIP

Fix critical bugs immediately. Major bugs before launch. Minor bugs can wait for v1.1!

Launch Day Countdown

T-7 DAYS

- ☐ Final feature freeze - no new features!
- ☐ Complete all critical bug fixes
- ☐ Set up production environment

T-5 DAYS

- ☐ Deploy to staging environment
- ☐ Full end-to-end testing
- ☐ Load testing completed

T-3 DAYS

- ☐ Marketing website ready
- ☐ Documentation written
- ☐ Support system set up

T-1 DAY

- ☐ Final production deployment
- ☐ DNS propagation check
- ☐ Payment system live test
- ☐ Analytics tracking verified
- ☐ Launch announcement scheduled

LAUNCH DAY!

- ☐ 6 AM: Final systems check
- ☐ 8 AM: Go live!
- ☐ 9 AM: Send launch emails
- ☐ 10 AM: Post on social media

☐ All day: Monitor and respond

Post-Launch Issues Tracker

FIRST 24 HOURS

Launch time: _____

First visitor time: _____

First signup time: _____

First payment time: _____

ISSUES ENCOUNTERED

| TIME | ISSUE | RESOLUTION | TIME TO FIX |
|------|-------|------------|-------------|
| | | | |
| | | | |
| | | | |
| | | | |

USER FEEDBACK LOG

Positive feedback:

Feature requests:

Complaints/Issues:

FIRST WEEK METRICS

Total visitors: _____

Conversion rate: _____%

Signups: _____

Revenue: \$_____

Paying customers: _____

Churn: _____%

Development Resources

ESSENTIAL TOOLS

- Version Control: GitHub, GitLab, Bitbucket
- IDE: VS Code, WebStorm, Sublime
- Database Tools: TablePlus, DBeaver, phpMyAdmin
- API Testing: Postman, Insomnia
- Deployment: Vercel, Netlify, Heroku, Railway

LEARNING RESOURCES USED

- Tutorial 1: _____
- Tutorial 2: _____
- Documentation: _____
- Stack Overflow solutions: _____

CODE SNIPPETS & LIBRARIES

Authentication library: _____

UI component library: _____

Payment library: _____

Email service: _____

Analytics: _____

EMERGENCY CONTACTS

Technical mentor: _____

Designer: _____

Beta tester #1: _____

Beta tester #2: _____

VENDOR SUPPORT

| SERVICE | SUPPORT EMAIL | RESPONSE TIME |
|---------|---------------|---------------|
| Hosting | | |

| SERVICE | SUPPORT EMAIL | RESPONSE TIME |
|---------|---------------|---------------|
| Payment | | |
| Email | | |

Daily Build Diary

DAY 1-3 NOTES

What I built:

Challenges faced:

Tomorrow's priority:

DAY 4-7 NOTES

What I built:

Challenges faced:

Tomorrow's priority:

DAY 8-11 NOTES

What I built:

Challenges faced:

Tomorrow's priority:

DAY 12-14 NOTES

What I built:

Challenges faced:

Build Phase Weekly Review

WEEK 1 METRICS

Hours worked: _____

Lines of code written: _____

Features completed: _____ / _____

Bugs fixed: _____

Tests written: _____

PROGRESS ASSESSMENT

On schedule? Yes ☐ No ☐

If no, why not: _____

Biggest win this week:

Biggest challenge:

WEEK 2 PLAN

Top 3 priorities:

1. _____

2. _____

3. _____

Potential roadblocks:

Help needed with:

ENERGY & MOTIVATION CHECK

Energy level (1-10):

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|

Module 3 Completion & Reflection

FINAL BUILD STATS

Total development time: _____ hours

Features shipped: _____ / _____

Known bugs remaining: _____

Code quality (1-10): _____

Ready to launch? YES! ☐ Almost ☐ Not yet ☐

KEY LEARNINGS

1. The hardest technical challenge I overcame:

2. The most important technical skill I learned:

3. What I would do differently next time:

4. My proudest achievement in this build:



MODULE 3 COMPLETE!

You built a working product from scratch!

Your MVP is ready. Your code is deployed.

READY FOR MODULE 4 CHECKLIST

- ☐ MVP fully functional
- ☐ Payment system integrated
- ☐ Deployed to production
- ☐ Basic testing complete
- ☐ Ready for real users!