

## Kurt Bonnici 5.1B - Web Development - Task 4

### 1. Functional Testing Based on IPO Chart

Tested Action	GitHub Commit ID	Expected Output	Actual Output	Pass/Fail	Notes
Add main website files (HTML/CSS/Images)	a11d803, 5fcef4e, 6dab683, f76aeb6	Site should display correctly with images and styles	Initially broken due to incorrect file structure	Fail	Fixed by re-uploading files and updating paths
Fix file structure and re-upload assets	8e7d6b0, a8c8a19	All assets load, no 404 errors	Images and CSS loaded correctly	Pass	Structure verified manually and via browser
Create working contact form	f417d3d, d6fb098	Submit form sends data to email	Form sends data correctly	Pass	Used formsubmit.co, verified by test submission
Add & validate links to social media and pages	d35a458, 0fa47af	Links open correct profiles/pages	Links functional	Pass	Used mailto: for email, and https:// for socials

Setup GitHub Pages	f4f1834, 6febe0e, 29b28e7	Site should be live at GitHub Pages URL	Initially broken, then fixed	Pass	Issue was due to misconfigured CNAME and missing index.html
Update index.html and favicon	f417d3d	Page title and icon display correctly	Icon visible in browser tab	Pass	Used <link rel="icon"> in <head>

## 2. Code Validation Using Online Tools

### HTML Validation

- Tool Used: [W3C HTML Validator](#)
- Pages Tested: index.html, contact.html
- Result: Minor warnings (e.g., missing lang attribute), no critical errors
- Fixes: Added missing lang="en" and used semantic tags (<main>, <section>)

### CSS Validation

- Tool Used: [W3C CSS Validator](#)
- Stylesheet: style.css
- Result: Valid, except for vendor-prefixed properties (acceptable)

### Link Checker

- Tool Used: [Broken Link Checker](#)
- Result: All external and internal links work as intended

### **3. Current Issues and Future Improvements**

#### **Issues:**

- Initial GitHub Pages 404: Caused by incorrect repo structure and missing index.html in root.
- Images not loading: Fixed by placing assets in the correct directory and updating `<img src="">` paths.
- Commit clutter: Frequent commits with similar names made tracking difficult.

#### **Future Improvements:**

- Accessibility Enhancements: Add ARIA labels and keyboard navigation support.
- Mobile Responsiveness: Use media queries or a CSS framework like Tailwind or Bootstrap.
- Form Confirmation Page: Redirect users to a styled thank-you.html after submitting.
- Add Animations: Use CSS transitions for smoother fade-ins and interactivity.
- Dark Mode Toggle: Add a button to switch between light and dark themes.
- Mobile Devices Navbar: Improving the navigation bar to have a fixed look and normal for mobile devices.