



Case Study: Visual Web QA Automation for BilaUnwan.pk

Powered by FursanStudio

1. Executive Summary

BilaUnwan.pk, a fast-growing online content platform in Pakistan, needed a scalable and intelligent solution to maintain a consistent visual experience across its rapidly evolving website. Manual QA was no longer sufficient to catch dead links, layout shifts, and browser-specific glitches in real-time.

FursanStudio delivered an AI-powered, automated **Visual Web QA Checker** that integrates ML-based anomaly detection, DevOps deployment workflows, and continuous monitoring. The solution reduced QA time by 80%, enabling BilaUnwan.pk to publish confidently and scale their operations with minimal technical overhead.



[Image Placeholder: Website showing typical layout drift issues]




2. About the Client: BilaUnwan.pk

BilaUnwan.pk is a youth-centric, non-commercial publishing initiative that provides an expressive outlet for writers, artists, educators, and activists across Pakistan. With over 3000 followers on Facebook and a contributor-driven model, it encourages critical thinking and artistic reflection on cultural and societal themes.

As their content output scaled across blogs, stories, and featured campaigns — maintaining a professional, error-free website experience became vital for audience retention and trust.

3. Business Challenge

BilaUnwan.pk's editorial and technical teams were facing mounting pressures:

- Broken or outdated internal links after content pushes
-  Visual layout drift between browsers and devices
- Difficult-to-catch frontend regressions after small code/content changes
-  Manual testing required significant time and effort after each publish cycle
-  Drop in viewer engagement due to unnoticed UX issues

At the same time, competitors offering professional platforms (e.g., Substack, Wix, or even Meta's in-house publishing tools) offered polished QA-integrated experiences at high recurring costs or limited customization.

4. FursanStudio's Solution: Visual Web Checker





We delivered a production-grade, automated QA monitoring tool that included:

Features:

- Real-time screenshot-based page crawling
- Detection of visual anomalies using trained ML models
- Dead link scanning and reporting
- Alerts via Slack/email/Telegram
- Dashboard to monitor scans and flag pages
- Auto-retraining pipeline with model version control

 [Illustration Placeholder: Flow of URL → Screenshot → ML Model → Alert]

5. Results & Impact

-  **80% reduction in manual QA effort**
-  Bugs discovered within **minutes** after page updates
-  Continuous retraining with labeled issue data
- Cross-device (mobile/desktop) page validation
-  Avoided vendor lock-in with open, containerized tech stack

This gave BilaUnwan.pk the confidence to scale editorial efforts, run outreach campaigns, and maintain professional consistency.

 [Image Placeholder: Comparison of broken vs. fixed layout identified by tool]

6. Why FursanStudio

Unlike typical one-size-fits-all QA platforms, FursanStudio focused on: - Integrating AI where it matters — image-level anomaly detection - Building a fully customizable, self-hostable product - Leveraging Docker, FastAPI, React, and MLFlow for robust DevOps/MLOps - Designing for content creators with non-technical workflows

 [Image Placeholder: Screenshot of web dashboard with alert history]

7. Competitive Advantage

Competitor	Monthly Cost (Est.)	QA Coverage	AI-based Monitoring	Open Customization
Wix + EditorX	\$30-\$90	Limited visual QA		
Substack	Revenue Cut	Minimal QA tools		
Custom QA Tooling	\$\$\$ Dev Cost	Fully custom	Depends	
FursanStudio	One-time setup	Visual + Structural		

8. Conclusion & Call to Action

The **Visual Web Checker** built for BilaUnwan.pk showcases how modern AI, automation, and DevOps can empower digital publishing platforms — without the burden of expensive SaaS fees or high-maintenance workflows.

If you're a content publisher, digital magazine, or a civic platform with limited dev bandwidth — FursanStudio can build the tooling that matches your voice **and** your velocity.

 **Let's talk about building your automated QA system today.**

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