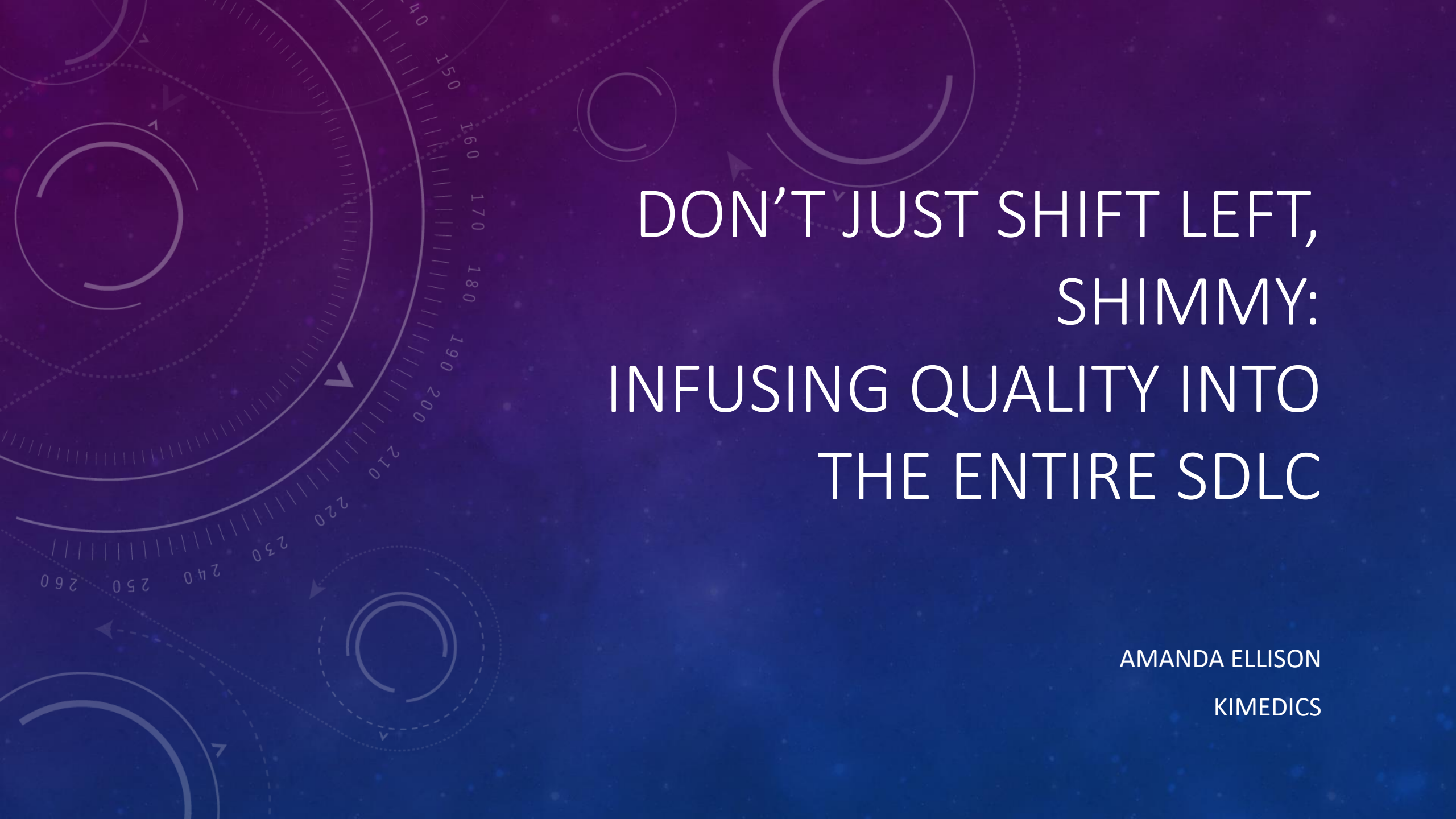


The background features a dark blue gradient with faint, light blue circular patterns. On the left side, there are several concentric circles with degree markings ranging from 40 to 260. Some of these circles have arrows indicating a clockwise direction. The overall aesthetic is technical and modern.

DON'T JUST SHIFT LEFT, SHIMMY: INFUSING QUALITY INTO THE ENTIRE SDLC

AMANDA ELLISON

KIMEDICS

WHO AM I AND WHY SHOULD YOU LISTEN TO ME?

- Over a decade of QA experience
- QA Manager at Kimedics
- Worked at companies varying in size from small startups to international companies
- Career timeline:
 - Beta tested for Bethesda and some small indie game studios as a hobby while finishing my masters
 - Started out (officially) at an IT consulting firm as a manual tester in a team of about 30 testers
 - Moved on to a QA engineer role at a small startup where I worked solo on the development team
 - Became an automation engineer at an international company
 - Still have no idea how large the QA department actually was
 - Hated working at a company so large and went back to startup life, working with one other QA engineer
 - Promoted to QA Manager 4 years ago and stayed in management ever since
 - Currently managing a team of five QA engineers

AGENDA

Brief overview of SDLC

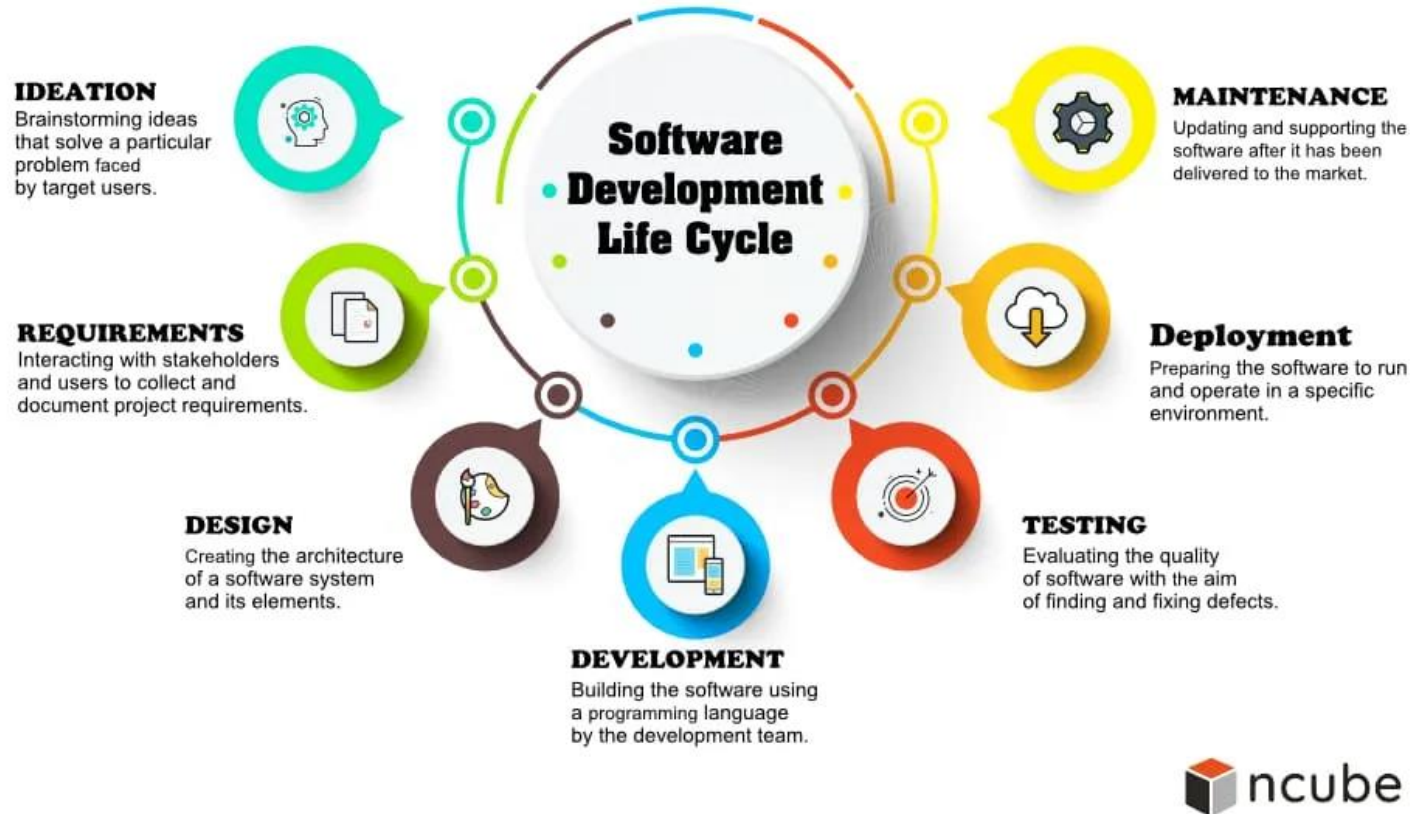
Shift Right vs Shift Left

Where does Quality fit?

- Project Formation
- Planning
- Design
- Development
- Testing
- Deployment
- Maintenance and Customer Support

SOFTWARE DEVELOPMENT LIFECYCLE

- Most typically all models have the following phases:
 - planning, requirements gathering, design, coding, testing, deployment, and maintenance
- Most common models are:
 - Waterfall, V-model, iterative, spiral, and agile
- What model does your company use?



SHIFT LEFT VS SHIFT RIGHT

- Shift Left
 - Integrates QA in the planning and development phases
 - Catch issues earlier!
- Shift Right
 - Focuses on monitoring and improving incident responses
 - Understanding user expectations and feedback



PROJECT FORMATION



- Often overlooked!
- Defines the project, team, timeline, scope
- QA should be involved from the start

PLANNING

- The planning phase is when Product gathers requirements from clients/stakeholders and decides on what they want to build.
- Both Dev and Quality can help in this phase by helping Product understand the feasibility of their vision.
- Review requirements for clarity, completeness, and testability.
- Risk Assessment and Mitigation
 - Create a risk mitigation strategy early!



DESIGN

- Not just the front-end design, but the back-end architecture as well
- Evaluate designs
 - Minimize complexity
 - Identify security vulnerabilities
 - Consistent design patterns across the product
 - Minimize the number of clicks
 - User experience!
- Most important phase to determine what type of automation is needed



DEVELOPMENT

- Unit testing
- Linting and coding standards
- Participate in peer reviews and static code analysis
 - Can sometimes find defects just by reviewing the code
 - Also a good way to make sure everything touched is tested!



When the QA Tester is really good at their job and sends you the 8th bug they found today

TESTING



"THE TESTER IS NOT AT HIS DESK!
YOU CAN DEPLOY, HURRY UP"



DEPLOYMENT

- Partner with DevOps!
 - Add automation to any build pipelines
 - Create a plan for monitoring and logging
 - Create a feature flag strategy
- Evaluate any rollout, rollback, or canary release plan for gaps
- Smoke and sanity testing after deployments

MAINTENANCE AND CUSTOMER SUPPORT

- Actually monitor your monitors
- Analyze customer-reported defects, feedback, and user analytics
 - Add the scenarios to your test suites
- Perform root-cause analysis to identify and prevent future issues
- Automation maintenance
- Partner with support to create learning materials for users



**“Quality is
everyone’s
responsibility.”**



W. Edward Deming

SUMMARY

- Quality has a place in every phase of the cycle
- Promote a culture of continuous quality improvement

QUESTIONS?

CONTACT ME ON LINKEDIN OR VIA EMAIL AT
ELLISON.AMANDA@KIMEDICS.COM

Thank you
for
listening!

