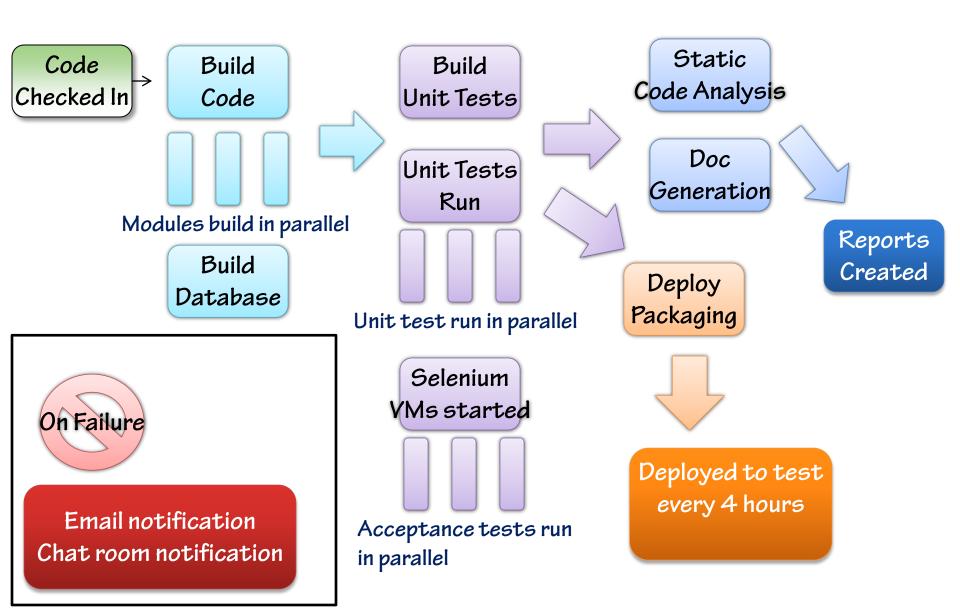
### **A Case Study**



Golden Coders Incorporated

"Software should be plated in gold"

#### The Flow



# **Stay Calm...**



It takes time to build a complex environment

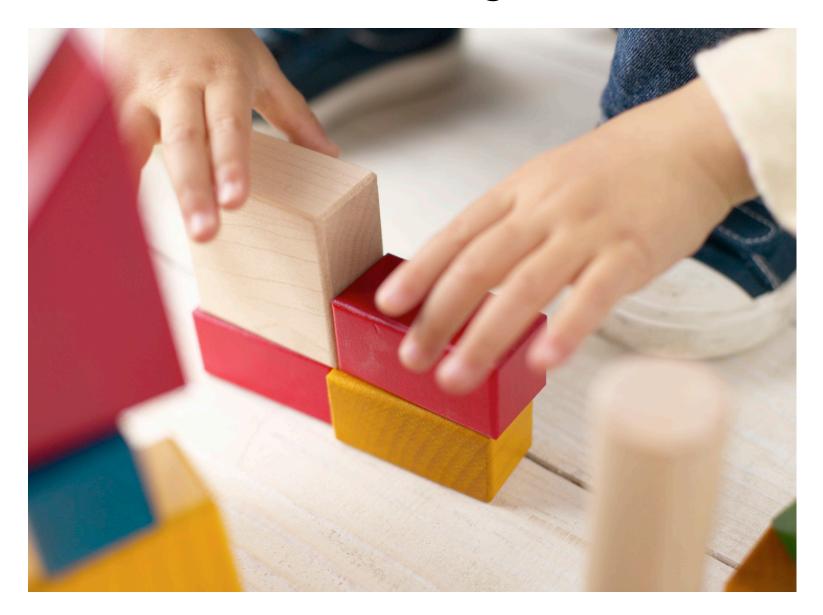
#### **Areas of Discipline**

- Unit testing
- Test coverage
- Acceptance Testing
- Code quality metrics
- Notifications
- Documentation
- Deployments



You too, can be a golden coder

# **Unit Testing**



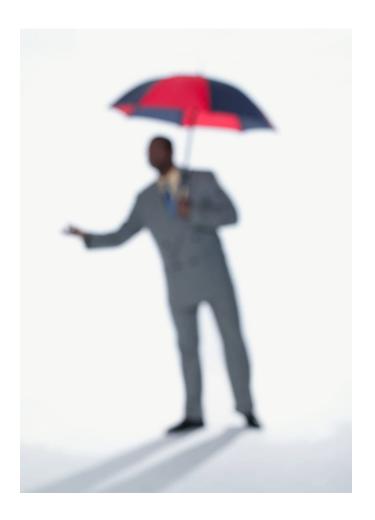
## **Unit Testing**

- Depends on source code being built
- Never let them fail
- Keep them unit size
- Keep them short



## **Test Coverage**

- Coverage doesn't mean quality!
- Perhaps fail the build



## **Acceptance Testing**



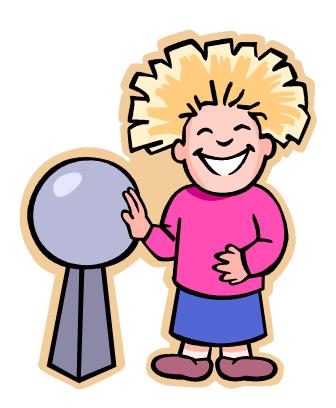
#### **Acceptance Testing**

- Can be slow
- Takes serious effort
- Blog series:
  - http://simpleprogrammer.com/getting-up-to-bat-series/



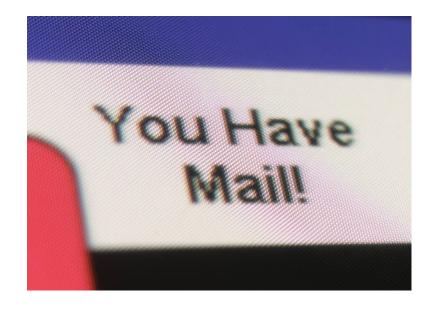
### **Code Quality Metrics**

- Static analysis
- Java tools
  - PMD
  - FindBugs
- .NET tools
  - FxCop
  - StyleCop
- Set a threshold
  - Things should not get worse



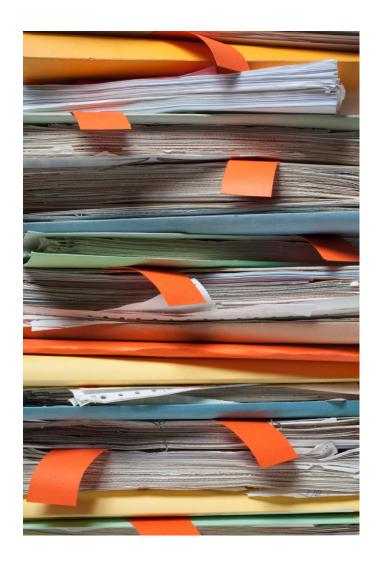
#### **Notifications**

- Make failures known
- Don't false fail
- Multiple channels
- Analyze failures



#### **Documentation**

- Source code doc generators
- Help file generation
- API documentation



## **Deployments**

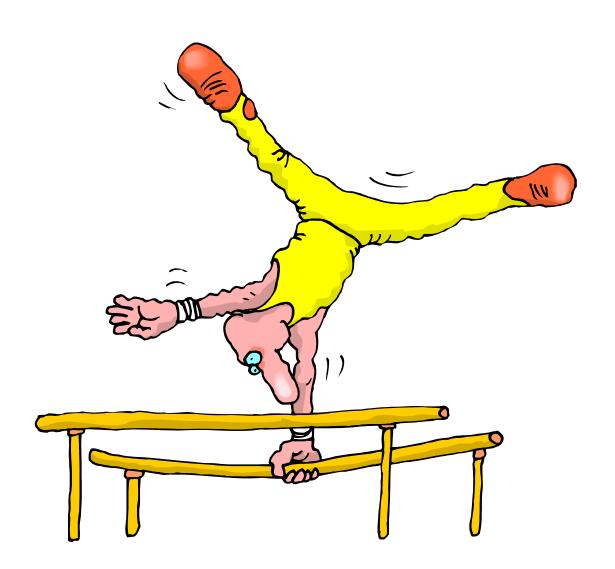
- Jenkins is great for deploying
- Periodic deployments
- Manual deployments
- Reporting built in



# **Growing**



# **Parallelization is Key**



#### **VMs are Your Friend**







### To the Cloud!



#### **Summary**

