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# Continuous Integration

CS480 Software Engineering

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CAL POLY POMONA

# Recap

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# Collect the Requirements



- Make it faster
- Private browsing mode
- Reading mode
- Trending web pages
- Easy to share/save pages
- Cooler UI
- ....



# Prioritize and Finalize the Features



Team Meeting (Business)

- Make it faster
- Reading mode
- Trending web pages
- ~~Easy to share/save pages~~
- Cooler UI
- Private browsing mode
- ....

**TO DO** DATE: \_\_\_\_\_  
FINISH BY: \_\_\_\_\_  
TOPIC: \_\_\_\_\_

No.	TASKS	DONE	ERRANDS	DONE
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				

No.	CORRESPONDENCE	DONE	NOTES
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			

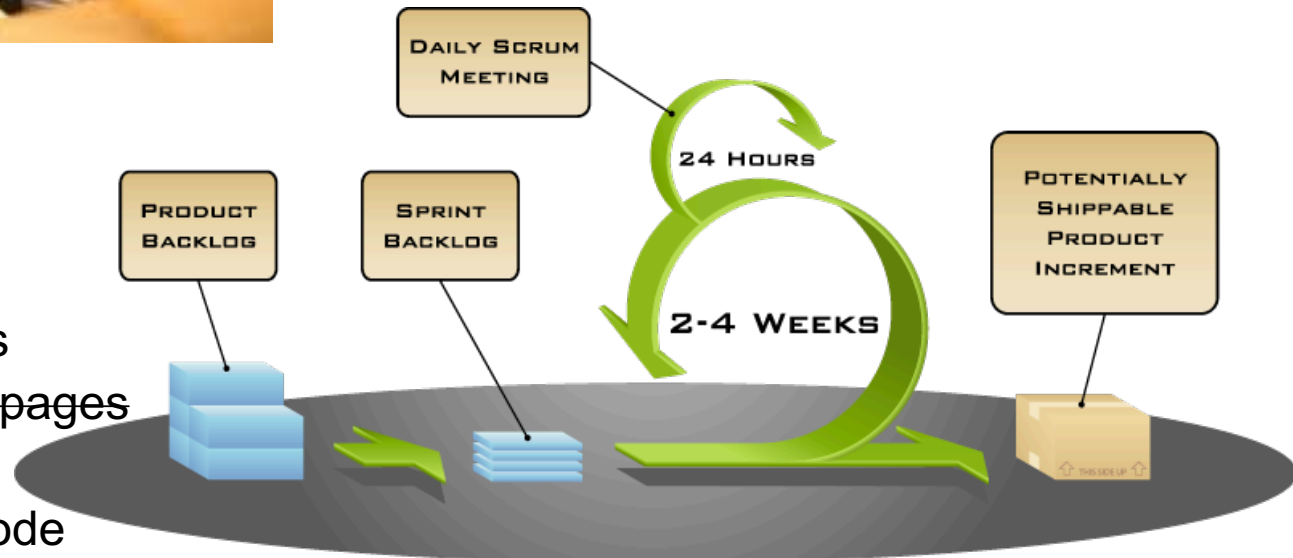
"Make a list—you'll feel better."  ALL DONE

# Dev Planning Meeting

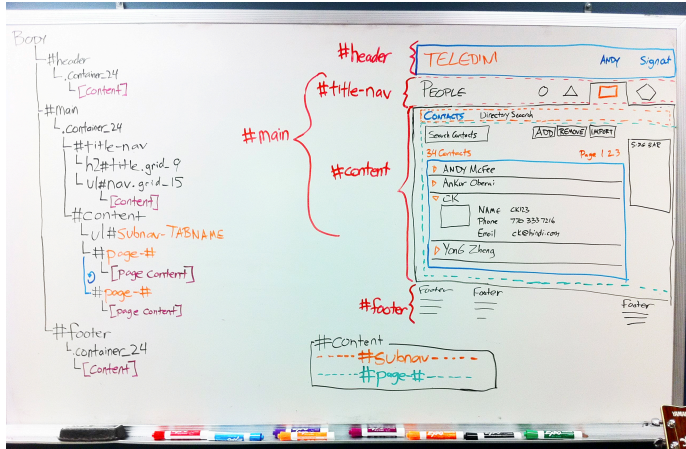


## Agile Development

- Make it faster
- Reading mode
- Trending web pages
- ~~Easy to share/save pages~~
- Cooler UI
- Private browsing mode
- ... ..



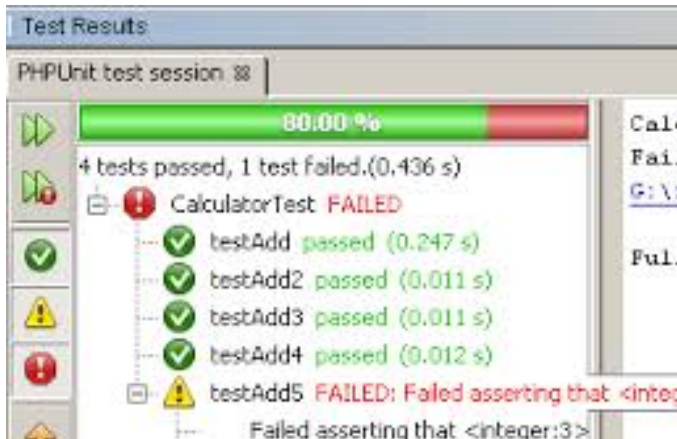
# Make the Change



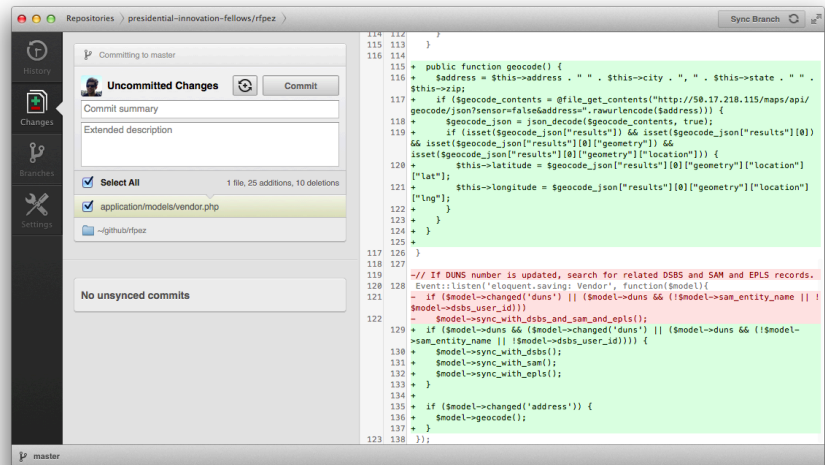
- Design



- Implementation



- Testing



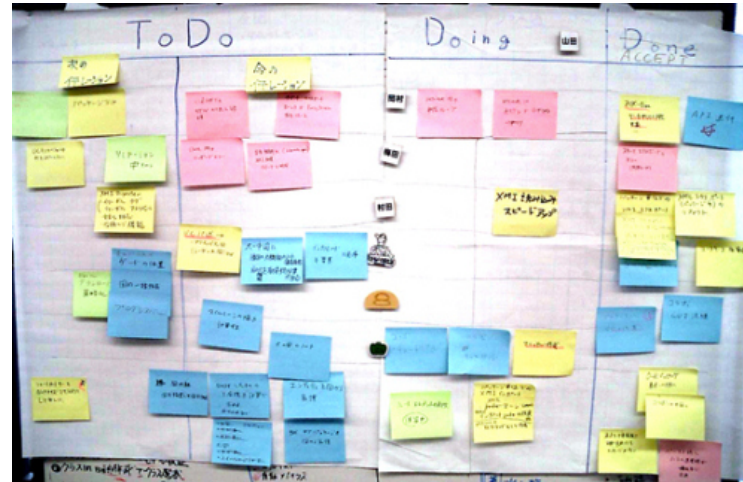
- Code Review

# Build & Deployment

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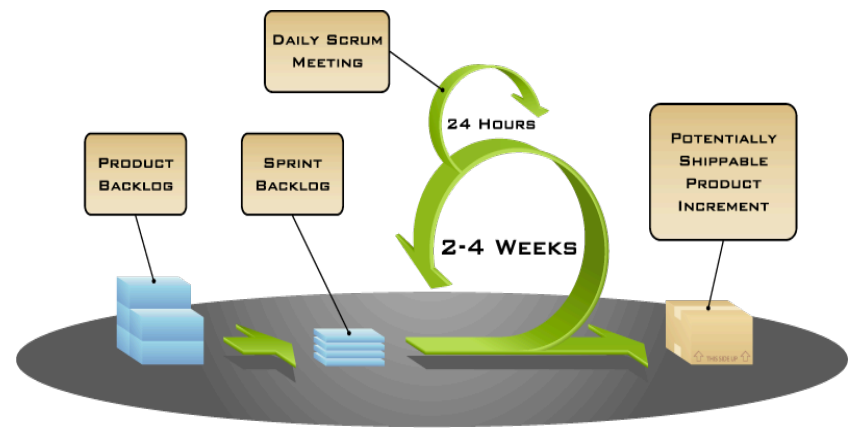
# Track the Development Progress



- Daily Scrum

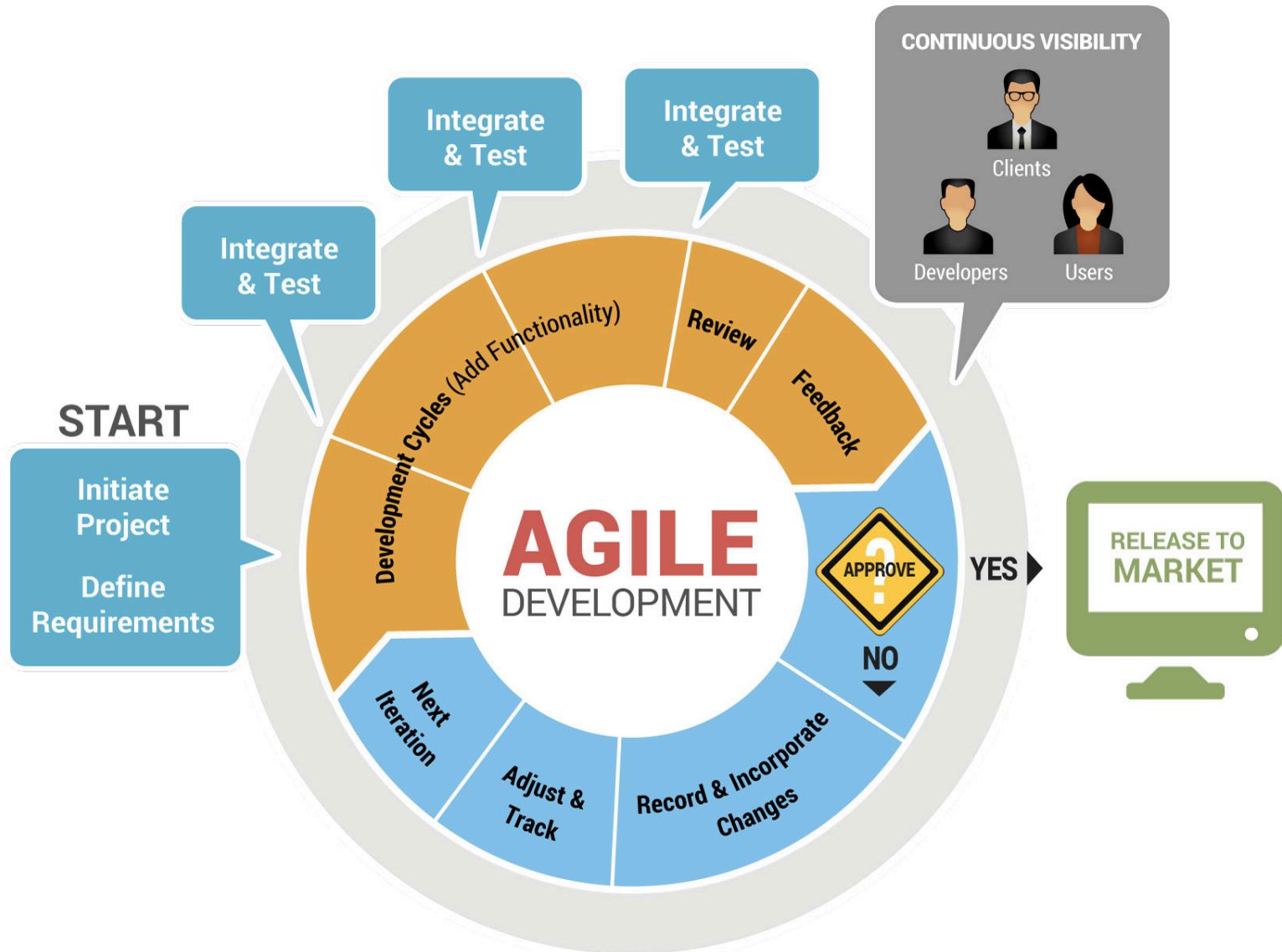


- Sprint Meeting

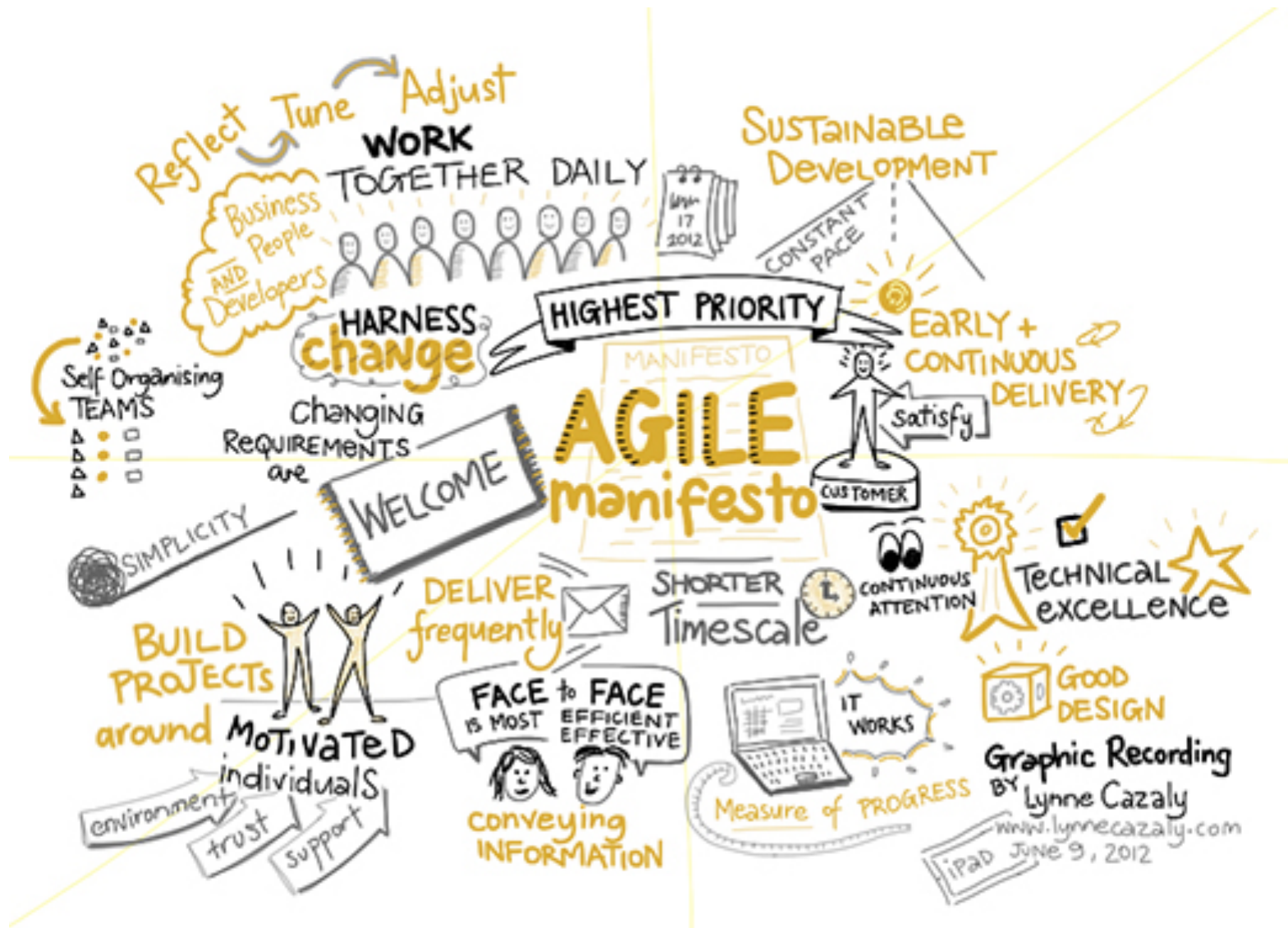




# Agile Development



# Agile Development



# Agile is NOT Trivial

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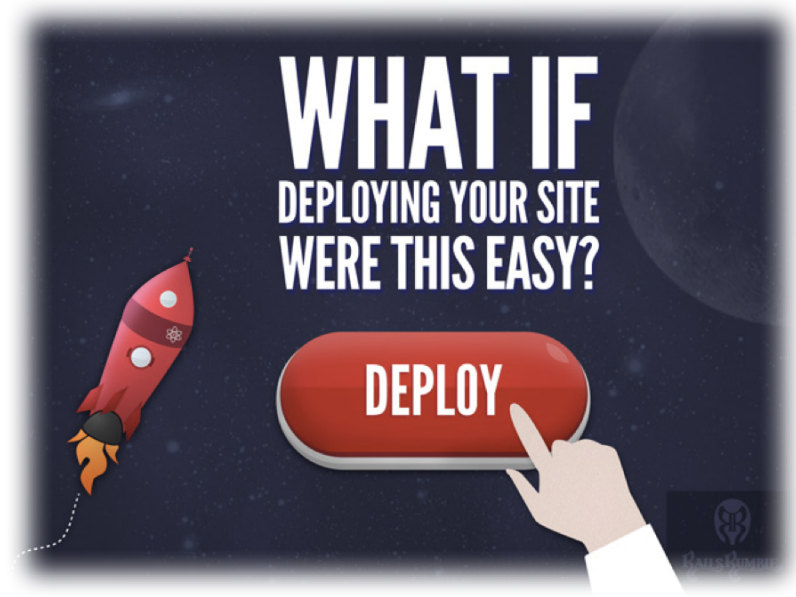
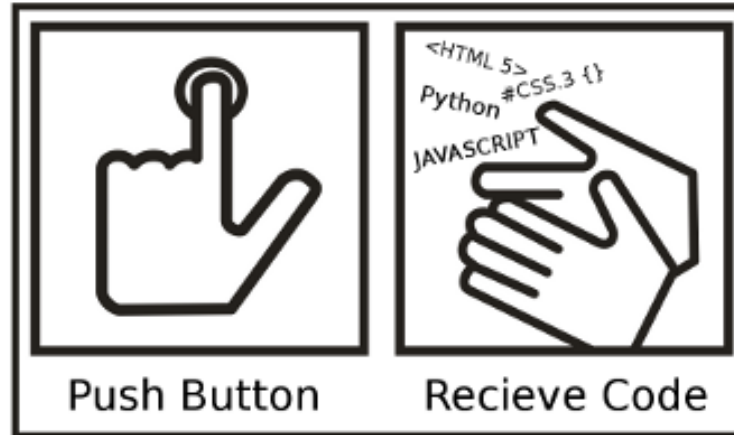
# How to Ensure Quality?

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# How to Ensure Fast Deployment?

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# How to Manage Cycles in Large-Scale?

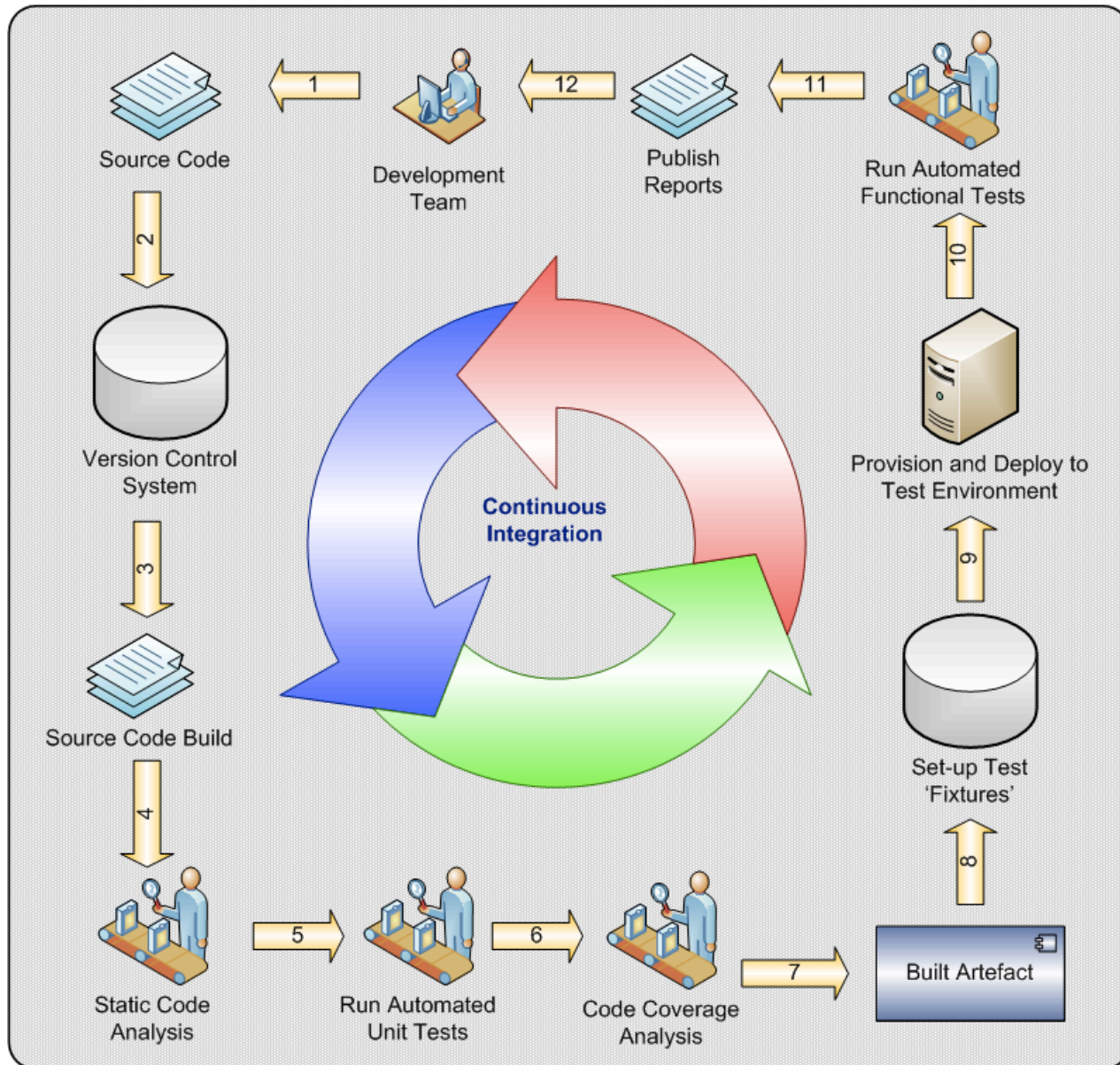
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Amazon's deployment service (Apollo)

Pushed **50 million** deployments in the last 12 months  
(95 every minute)

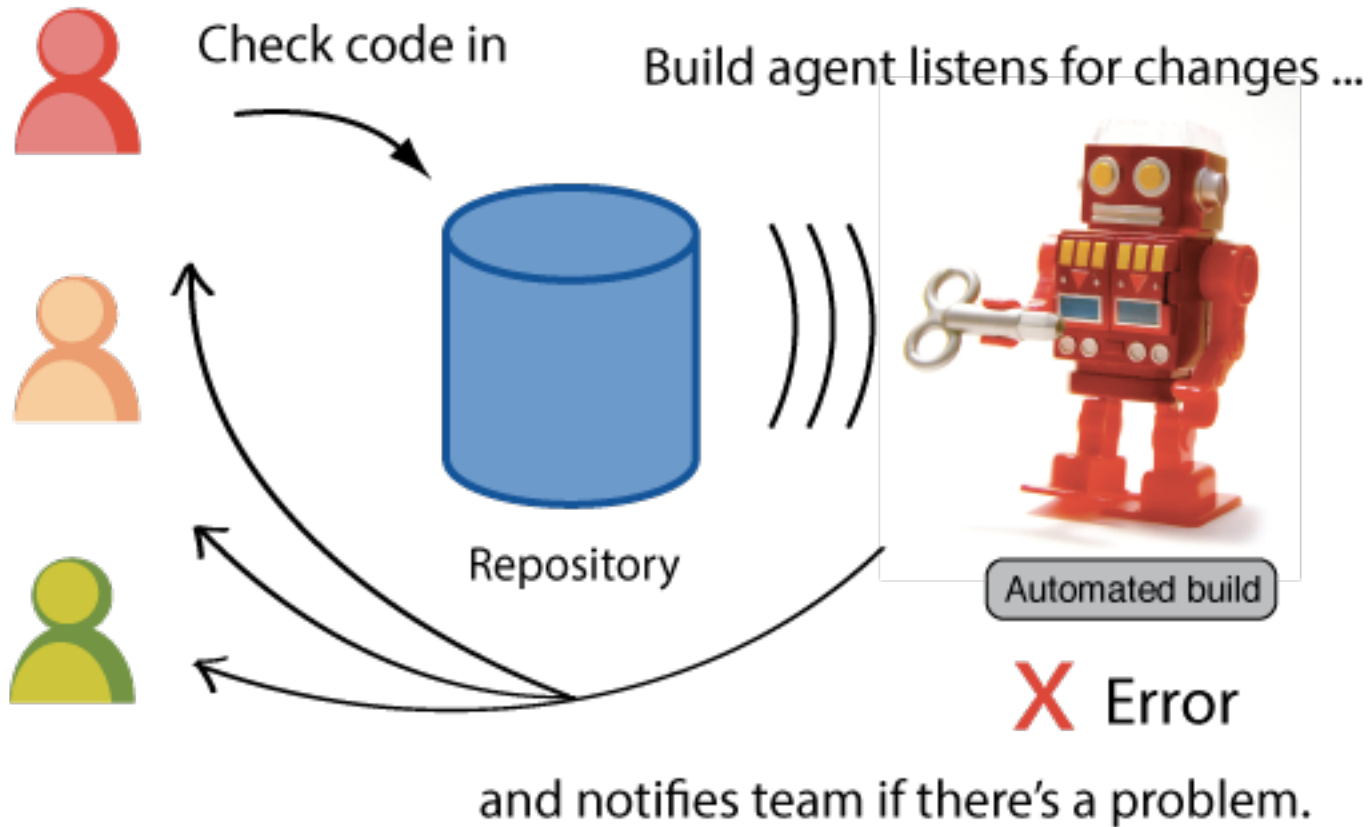


# Continuous Integration (CI)



# Automated Build and Testing

Developers





# Automated Deployment

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## CONTINUOUS DELIVERY



## CONTINUOUS DEPLOYMENT



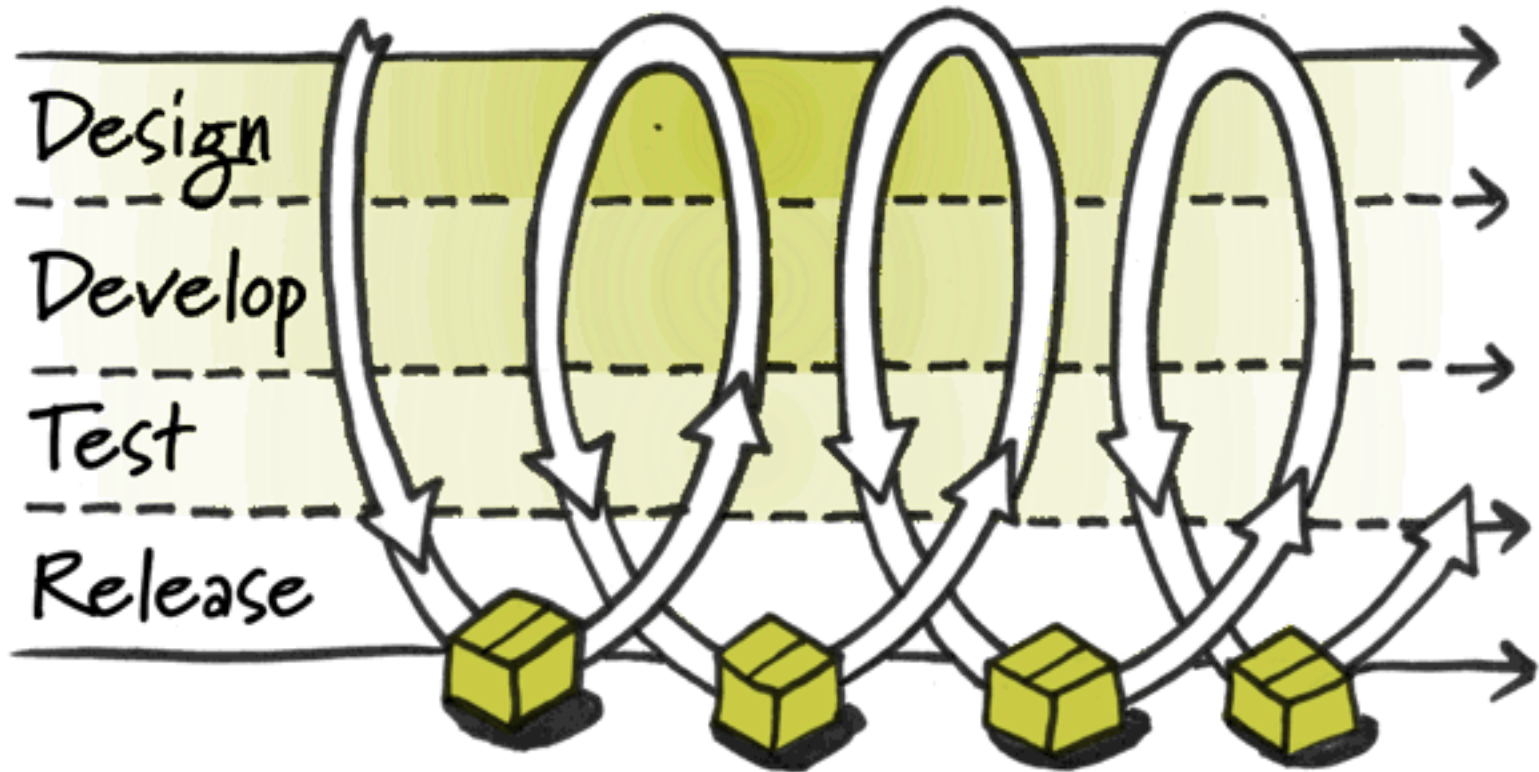
# Centralized Management

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# Goal of Continuous Integration

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# Jenkins Demo

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