
Continuous Integration

CS480 Software Engineering

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CAL POLY POMONA

Recap

{RECAP}



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
-

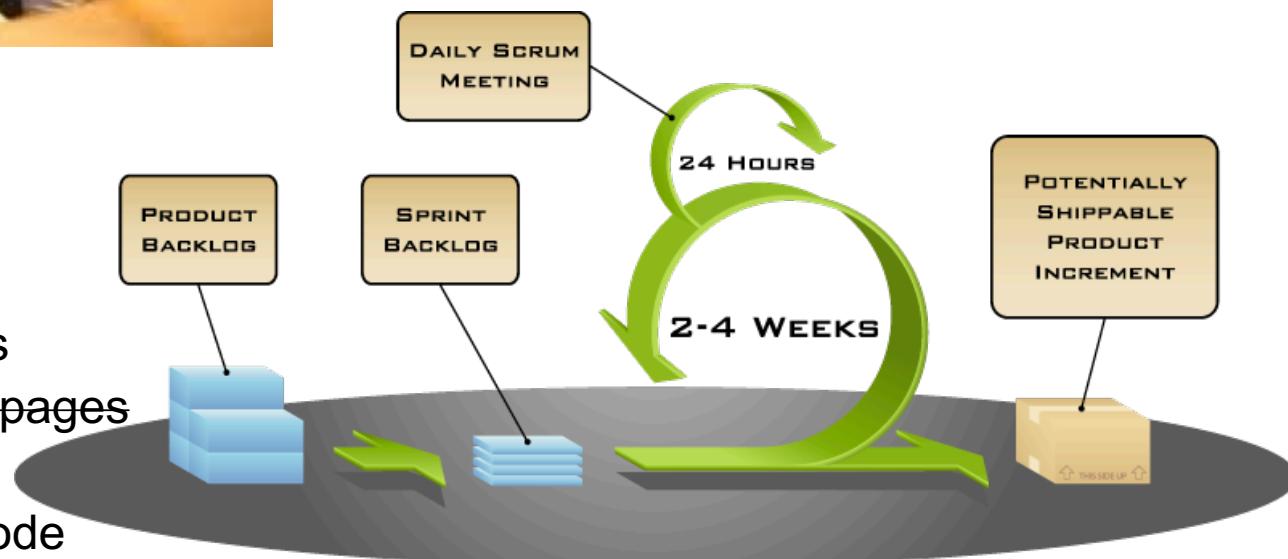


Dev Planning Meeting

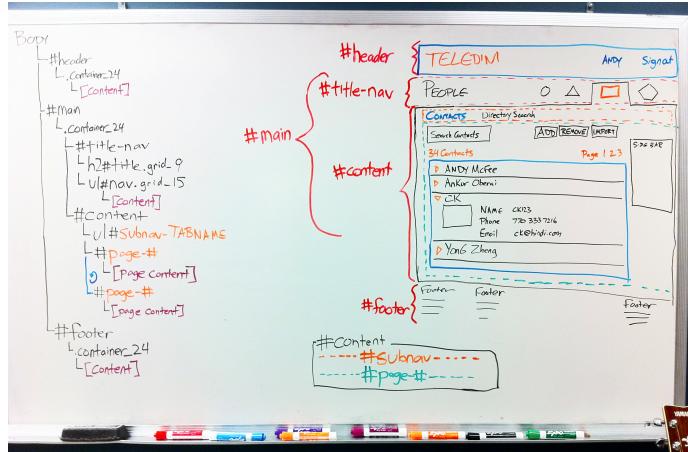


Agile Development

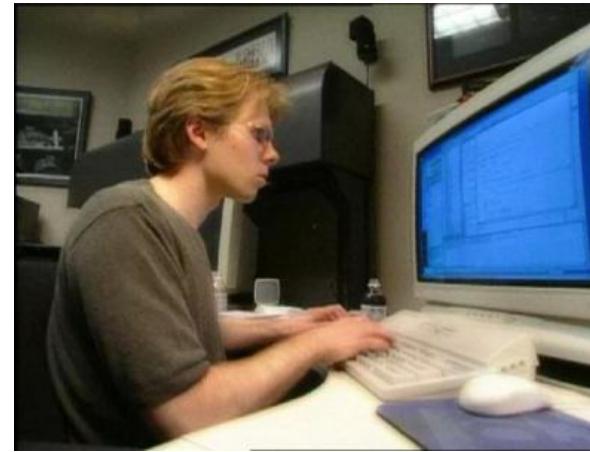
- Make it faster
- Reading mode
- Trending web pages
- Easy to share/save pages
- Cooler UI
- Private browsing mode
- ...



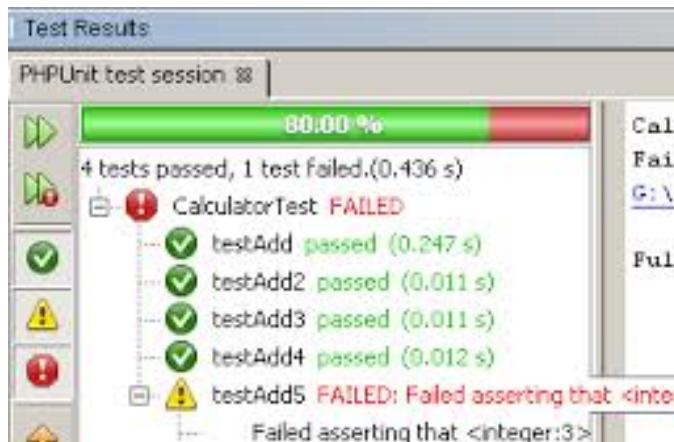
Make the Change



- Design



- Implementation



- Testing

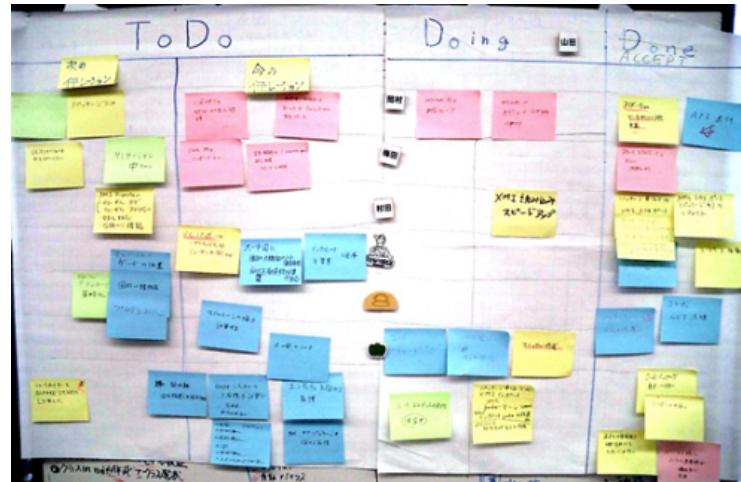
```
112 113 }
114 + $address = $this->address . " " . $this->city . " " . $this->state . " "
115 $this->lat = $address->lat;
116 $this->long = $address->long;
117 + if ($geocode_contents = $file_get_contents("http://50.17.210.115/maps/api/geocode/json?sensor=false&address=".rawurlencode($address))) {
118 + $geocode_json = json_decode($geocode_contents, true);
119 + if (isset($geocode_json["results"]) && isset($geocode_json["results"][0])
120 + &amp; isset($geocode_json["results"][0]["geometry"]["location"]))
121 + $this->latitude = $geocode_json["results"][0]["geometry"]["location"]
122 + ["lat"];
123 + $this->longitude = $geocode_json["results"][0]["geometry"]["location"]
124 + ["long"];
125 + }
126 + }
127 )
128 -// If DUNS number is updated, search for related DSBS and SAM and EPLS records.
129 + $model->sync_with_duns();
130 + if ($model->changed('duns') || ($model->duns && (!$model-
131 - $model->sync_with_dubs_and_sam_and_epls()));
132 + $model->sync_with_dubs_and_sam_and_epls());
133 + if ($model->changed('duns')) {
134 + $model->sync_with_sam();
135 + $model->sync_with_epls();
136 + }
137 +
138 + if ($model->changed('address')) {
139 + $model->sync_geocode();
140 + }
```

- Code Review

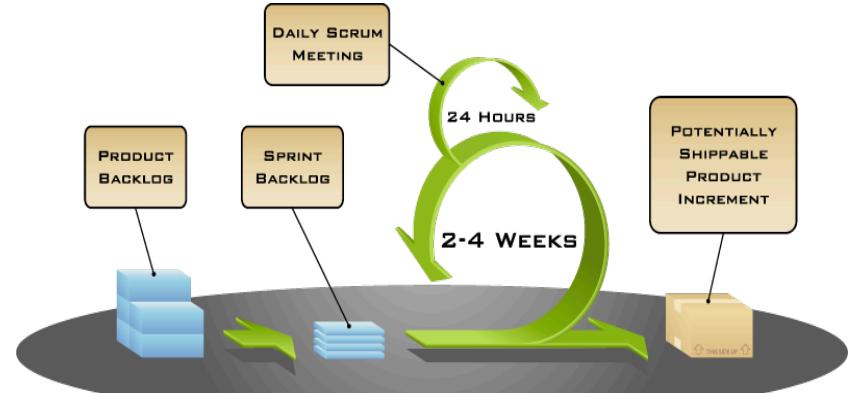
Build & Deployment



Track the Development Progress



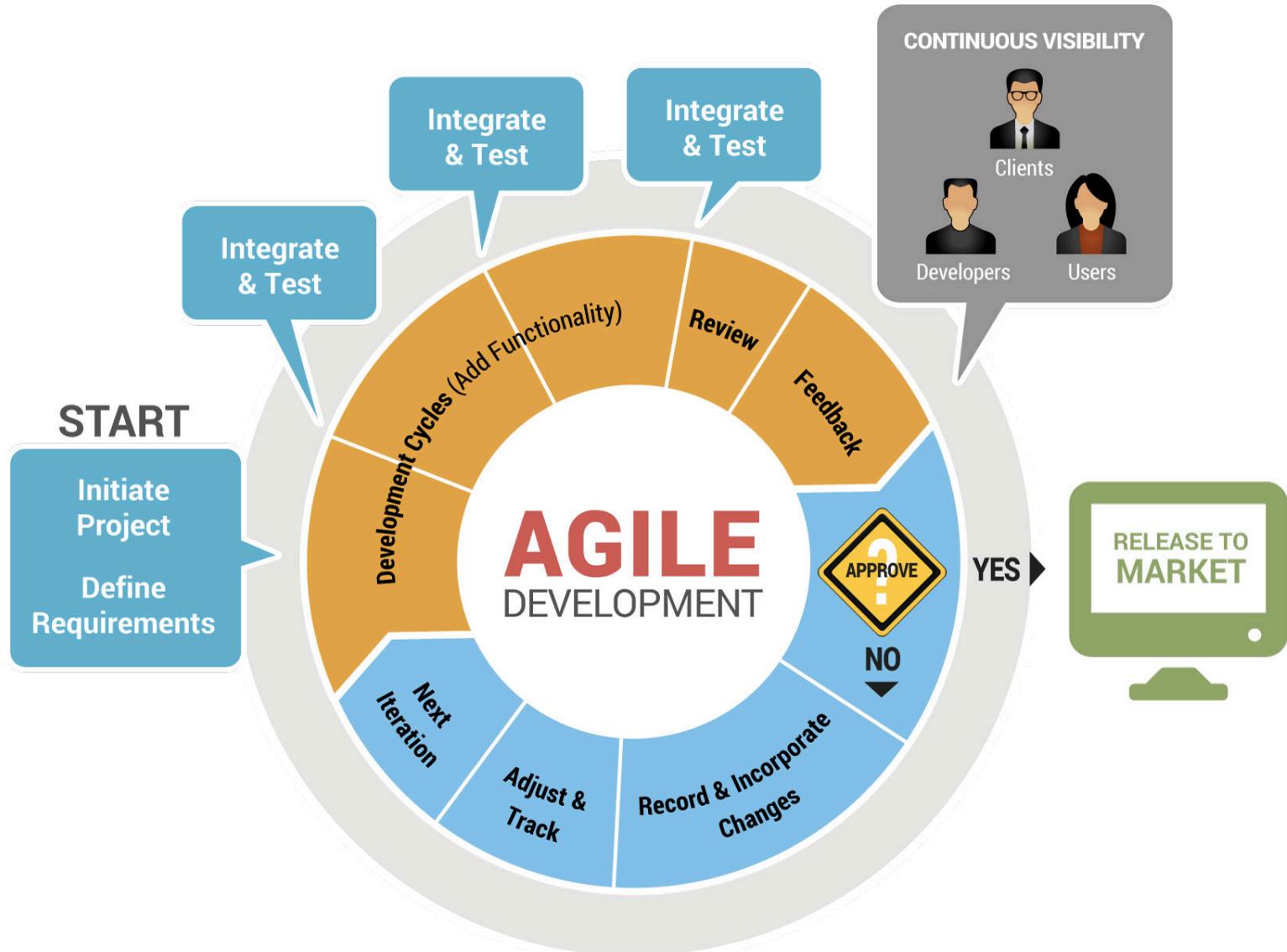
- Daily Scrum



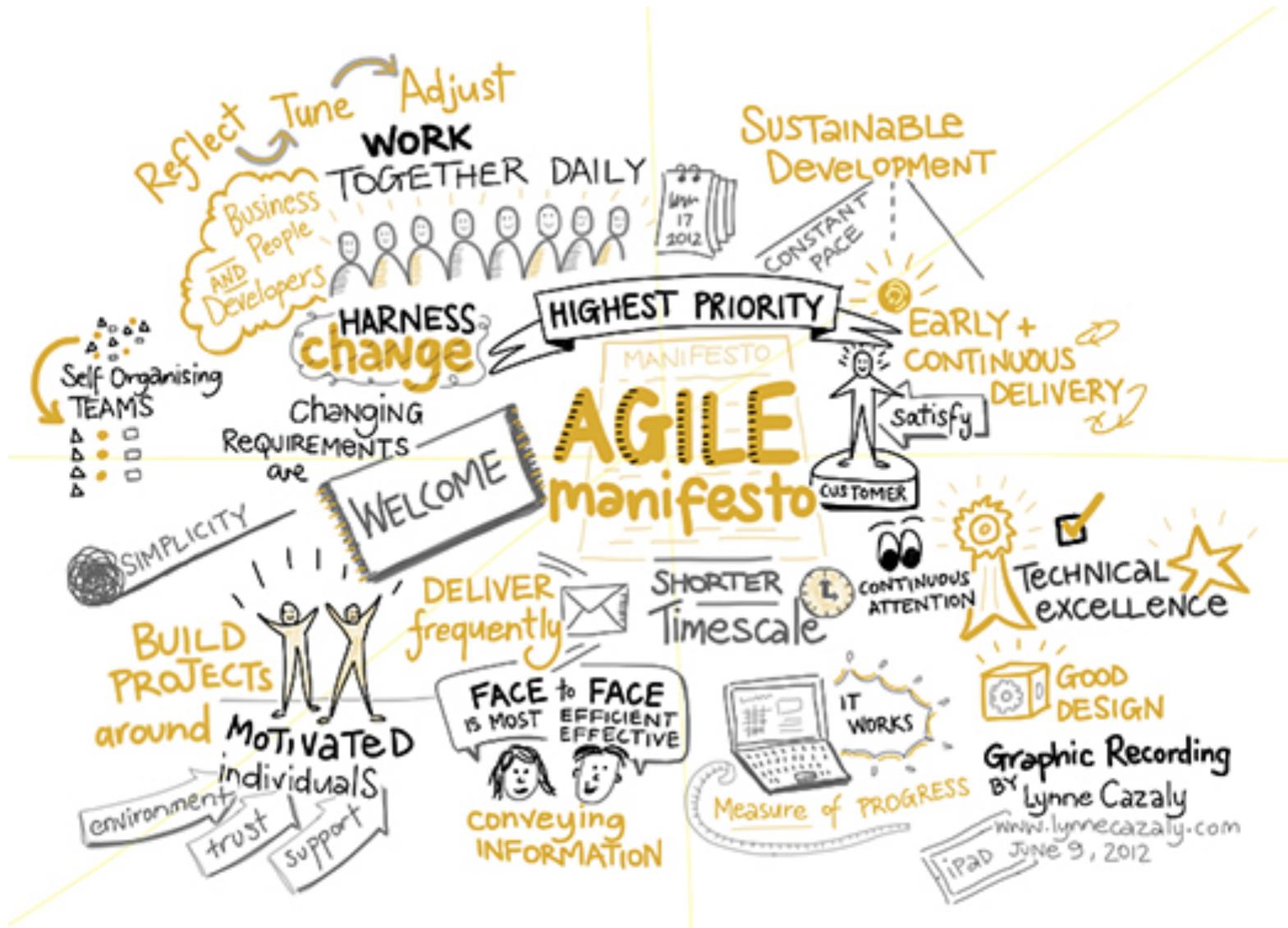
- Sprint Meeting

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Agile Development



Agile Development



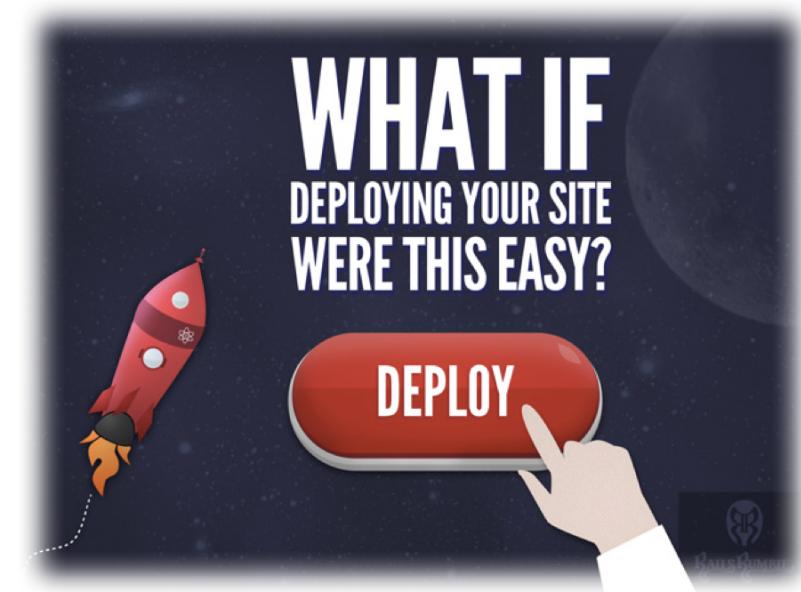
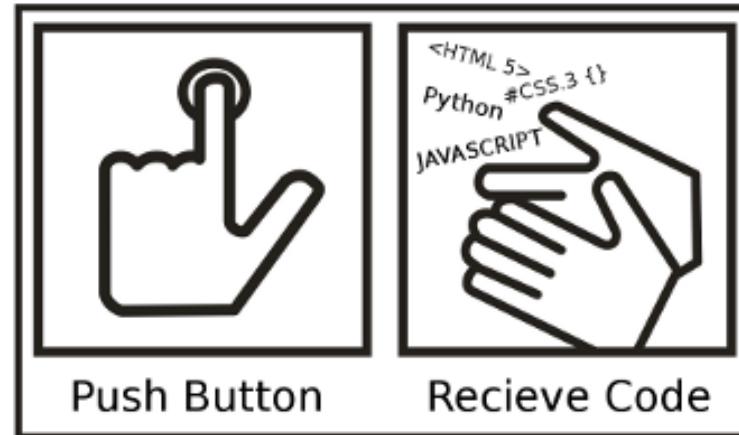
Agile is NOT Trivial



How to Ensure Quality?



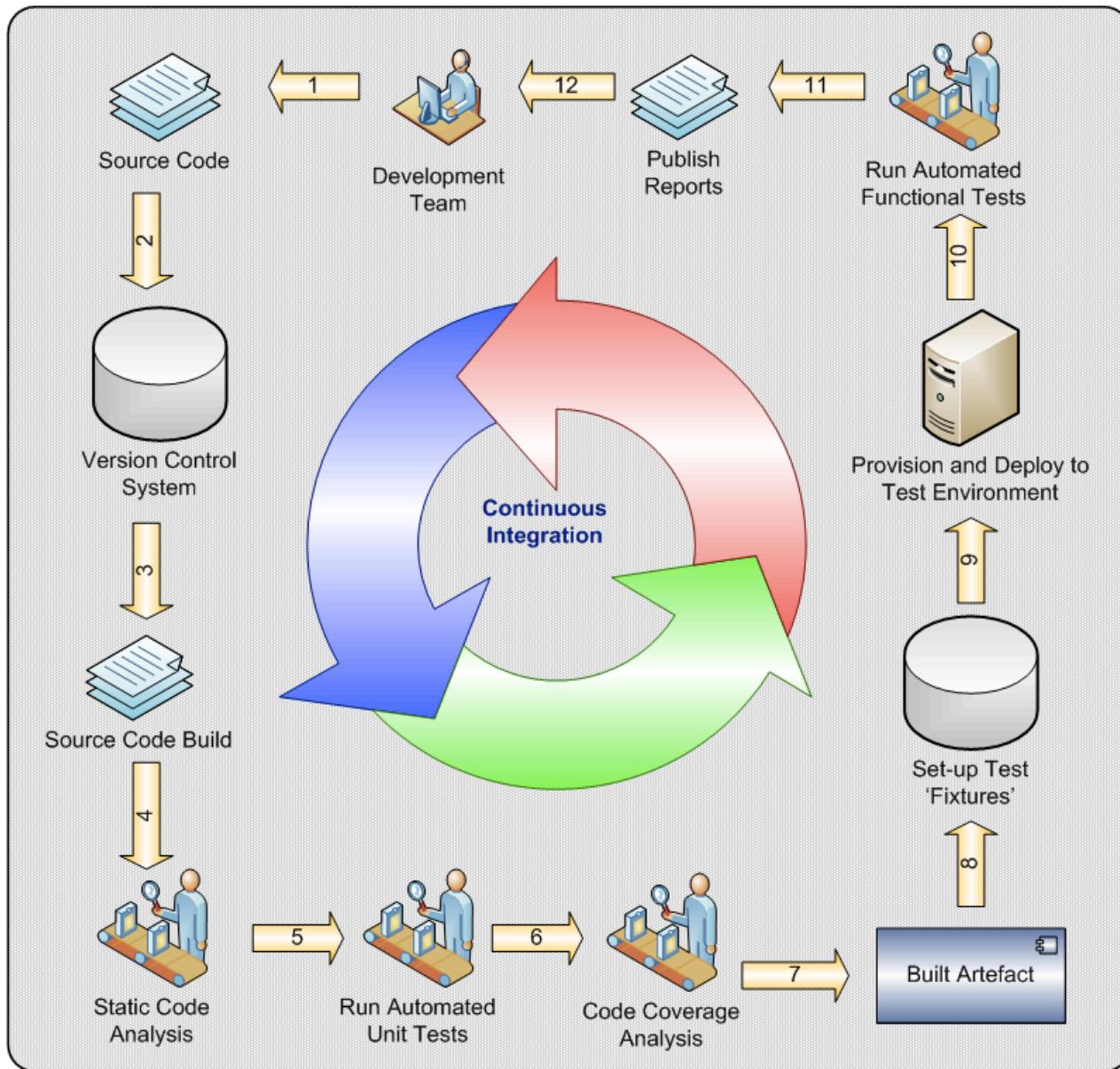
How to Ensure Fast Deployment?



How to Manage Cycles in Large-Scale?

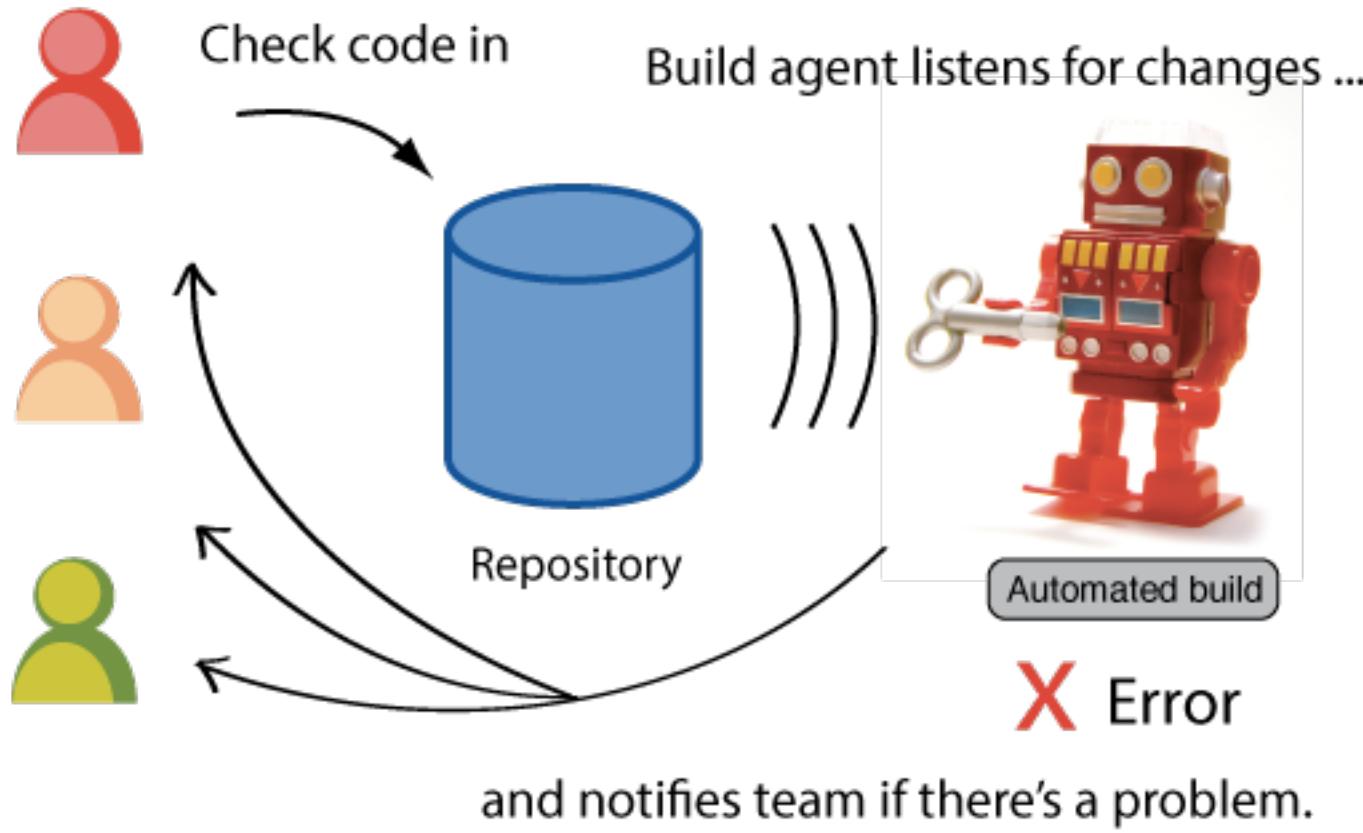


Continuous Integration (CI)

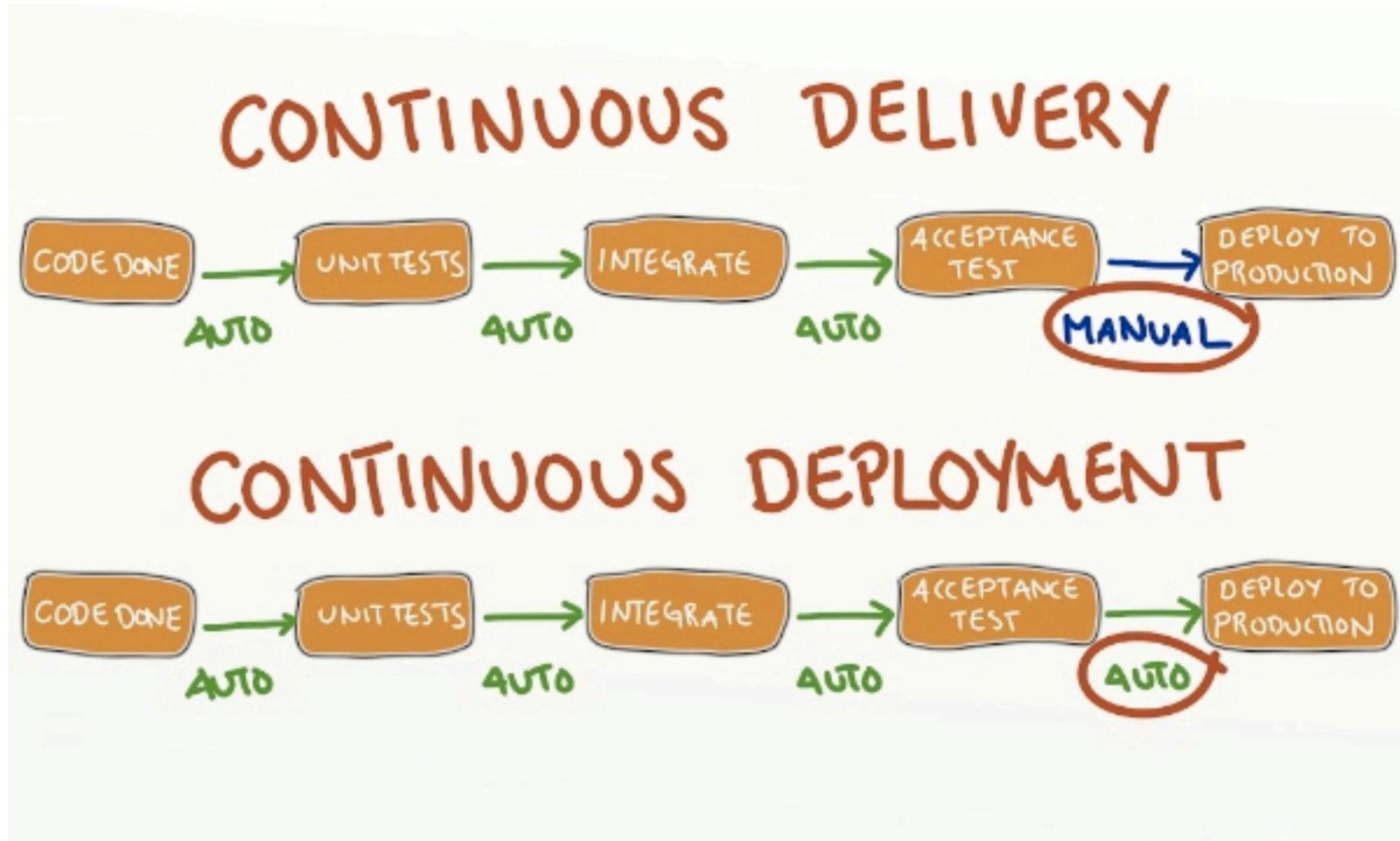


Automated Build and Testing

Developers



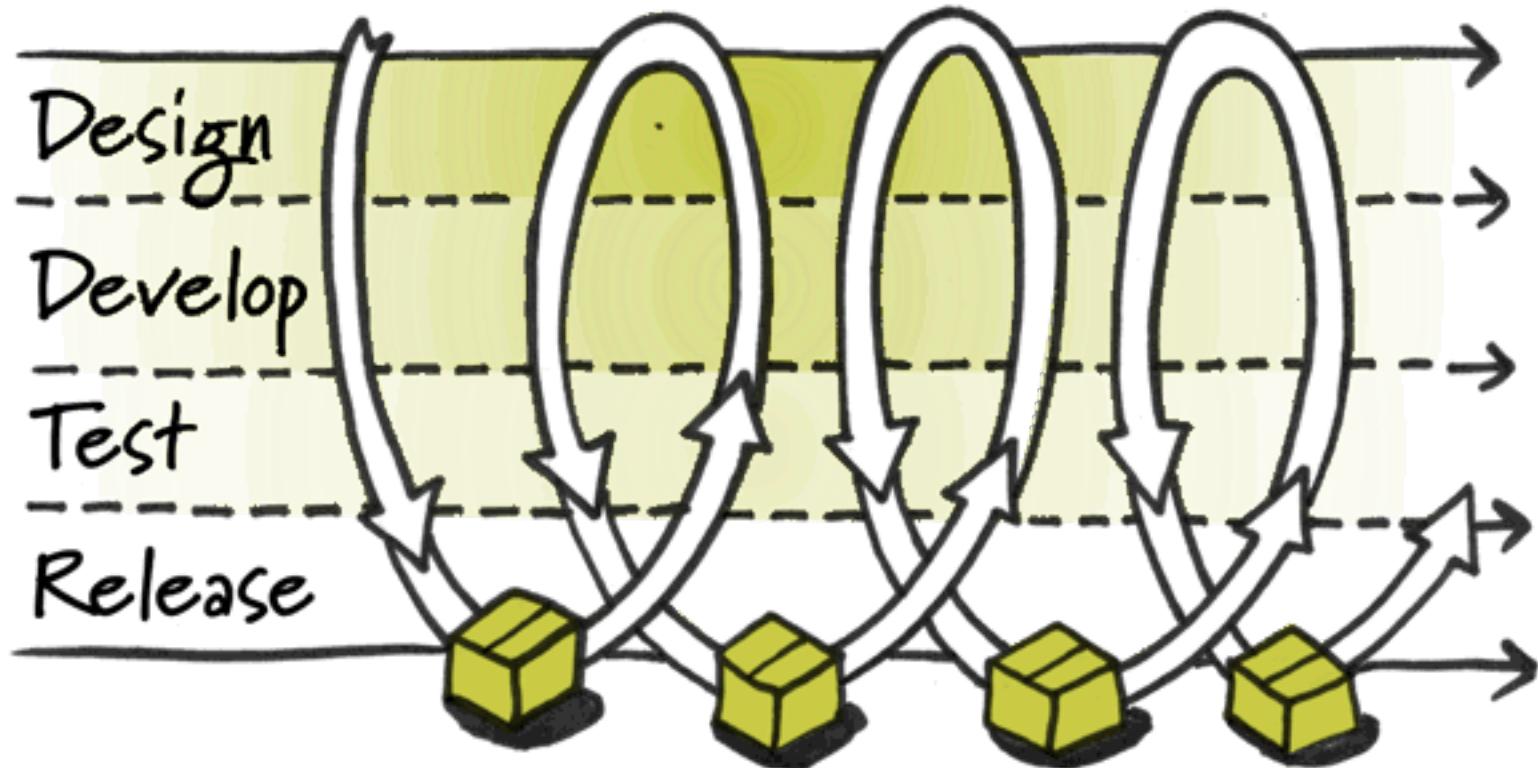
Automated Deployment



Centralized Management



Goal of Continuous Integration



Jenkins Demo

