DSL for stock market

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Quality

- Unit and integration tests as in any decent software
- DSL core must be covered by tests much more then the GUI
- Audit of core DSL code at the end
- Tests run on every change, at least 30% coverage for GUI, 80% for GUI
- Code review required for changes

Communication

- During first stage, daily for ~15 minutes every day
- In consecutive stages weekly whole team meetings for about 1 hour, and no daily. The reasoning is that people will know what to do, there are quite clear interfaces
- Slack for messaging
- Sprint planning and reviews with only project manager and person representing partner broker -~1h each
- Every month review of the project with the board
- ~ 4h

Configuration

Just before starting project, project manager has to setup the following:

- Gerrit
- Jira
- Slack
- Jenkins for CI
- Aws testing server, always with latest version of server. GUI developer will use a simple mockup done over the evening, so no staging evironment

Product stages

- List of products in stages
- Image summarizing them

First stage - two months

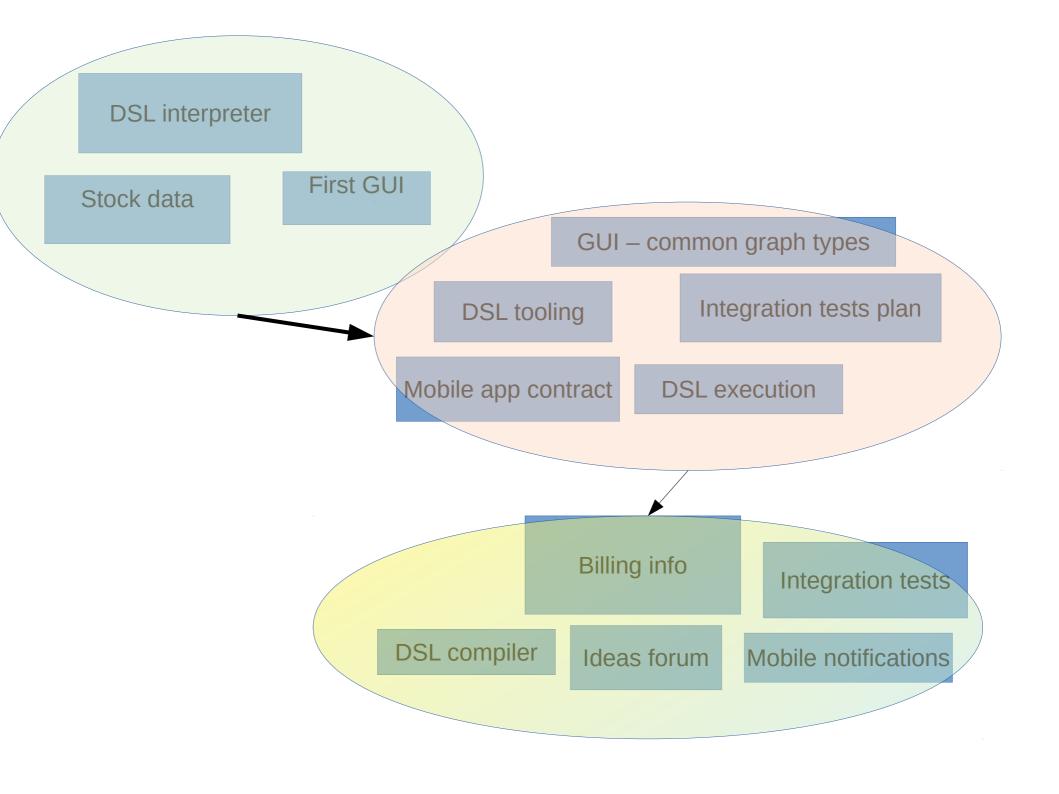
- DSL specification and interpreter working only on correct input
- Pipeline for loading data from stock market into database
- First version of GUI with layout and displaying simplest charts (trend) based on mockup data

Second stage - three months

- DSL corectness checker returning info about error location
- Contract with mobile app company and they start working on it
- Web service allowing DSL execution and returning resulting streams of stock data from database
- Integration tests plan
- GUI advanced graph transformations and types of charts

Third stage - two months

- DSL compiler
- Running DSL when specified events occur
- Web service for DSL measures resource consumption for billing
- Sending notifications from web service to mobile app
- Creating/executing integration tests
- Integrating GUI with full functionality of Web service
- Ideas forum



Budget

- Products: ~255,000 PLN
- Risks: ~70,500 PLN
- Buffer: ~ 35,000 PLN (10% of products + risks)

Total: 360,500 PLN