

SE 410 - Assignment 4
2/29/2016
Бутерброд Sandwich report

Capex Investment

- 10 JA Henckels Cleavers: ₱3798 each
- 10 Peanut Butter and Jelly Dispensers: ₱15195 each

Total: ₱189940 out of ₱75976050

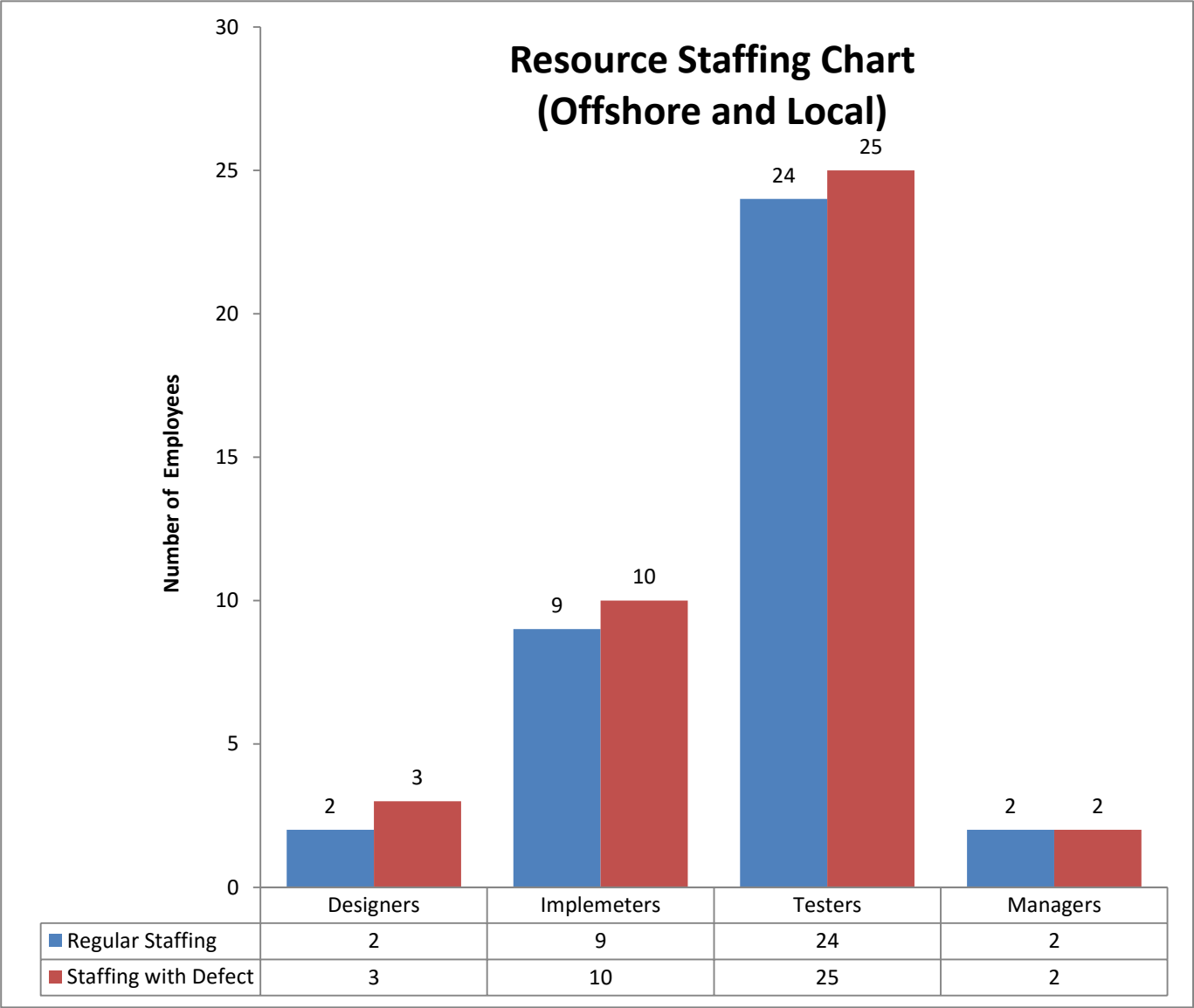
Process Improvements

In addition to the use of the cleaver for cutting, we have added the use of PB&J condiment dispensers to decrease implementation time by 13.37 seconds. This has resulted in a reduced requirement of team size from 9 implementers to 7 implementers

Labor Rate Calculations

With high and low probability offshore labor at 25% wages, and improved processes:

- Total cost for year's order will be ₱86853141
 - Reduction of ₱38069487 from previous cost estimate
 - This is still ₱10866141 over budget
- With 10% defects in regular team and 30% defect rate offshore, total projected cost will be ₱97358875
 - This is still ₱27563752 less than cost estimate before offshore team is added
 - Offshore team with 3x defect rate at ¼ labor rate is more profitable than entirely local team
 - ₱21371875 over budget

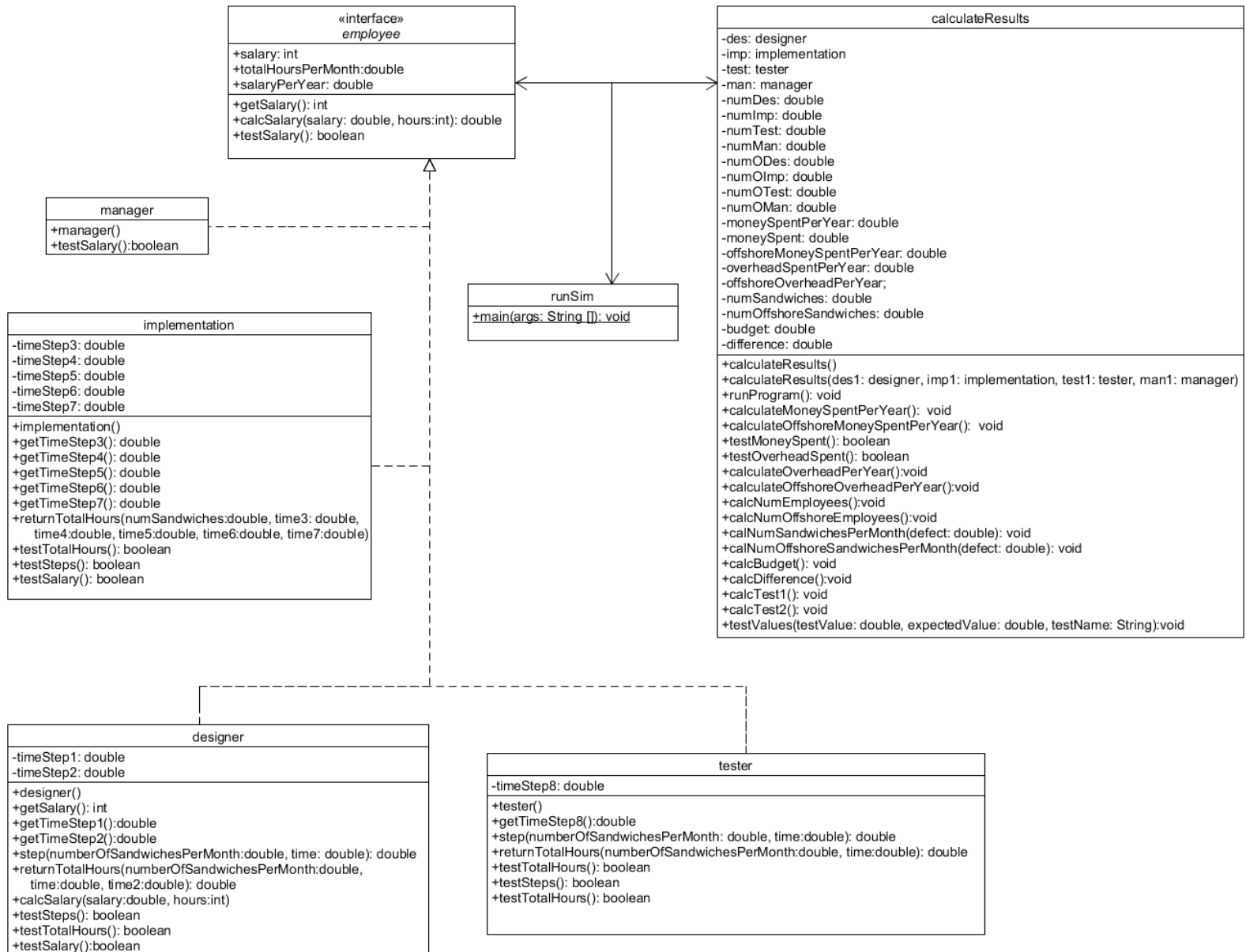


Code Review

1. Is the code reusable? Yes.
2. Were the functions well thought out and object oriented where possible? Yes.
3. Are the comments clear and useful? Yes.
4. Were there enough comments? Yes.
5. Is the code as efficient and clean? Yes.

We decided to do the code review after the code is committed, rather than before. This way, the code that works is put out to production and not delayed. We also decided that the code review would be done by someone close to the engineering team, who understand the purpose of the code but did not write it themselves. This allows for a fresh set of eyes to review the code instead so that they can be more objective than a person who wrote the code. Another perspective and new insight will produce more beneficial results to help in improving any code.

Class Diagram v2



Flow Chart v2

Pre-conditions:

Have all of the ingredients available and enough of each ingredient & know which type of each ingredient is desired.

Have all tools and assume they are clean.

Clean the knife.
Dispensed 1 pump of PB on bread.

Clean the knife.
Dispensed 1 pump of Jelly on bread.

Both pieces of bread are ready to be put together and both hands available.

Get the ingredients (peanut butter, jelly, and two slices of bread).

Get tools (knife, cleaver, dispensers and plate).

Put one slice of bread on the plate and apply peanut butter to 1 side with knife making sure to cover as much of the side as possible. Do this as quick as you can without making it messy.

Move that slice aside and put the other unused slice of bread on the plate. Apply jelly to 1 side with knife making sure to cover as much of the side as possible. Do this as quick as you can without making it messy.

Combine bread slices with PB & J facing inwards and trying your best to line up the edges of the bread.

Cut sandwich diagonally with cleaver.

Serve sandwich.

Eat sandwich and enjoy!

Post-conditions:

Ingredients are assembled and ready to use.

Tools are now with rest of ingredients and ready to use.

1 slice of bread has PB spread onto one side.

Other slice of bread has jelly spread onto 1 side.

Your sandwich is now in 2 triangular pieces.

Sandwich is served.

Sequence Diagram v2

