

Task Assignment Automations:-

1. Each developer has a set of skills,
2. ~~We~~ We have a set of tasks provided by the owner as a plain text.
3. System should extract All tasks Required, And it should automate the time estimation for each task and its difficulty.
4. Assign each task to the available developers based on their skills.

→ IF he was able to finish it in { Required Time
Good Quality
Numerous Test Cases
we increment points of this developer
→ else, deduce points.

Quality is based on
Each Company Prospective

5. ~~And go back to step 4~~
We have two cases

1. Exceed Time Estimation:

1. Assign it to more skilled developer
→ on success, deduce from lower skilled developer
→ on failure, Re Estimate the Time & difficulty of the issue & assign it again to a Junior.

2. Bad Quality:-

1. Give the developer second chance to enhance the quality
2. New Time estimation = λ (old Time Estimation)
→ based on the quality.

→ On Success → Assuming that the developer has not wasted any time → System Bad estimation
 → ~~on failure~~ → we should increment the Time Estimation for all the cluster which the Task was related to.
 → Remove developer Punishment
 → Increment Reward.

→ On Failure:

1. Deduce Points from the developer (First Punishment)
2. Assign the Task to Another developer with Higher Skills.

3. Time Estimation = Old Time Estimation + λ () → λ ()
 developer

→ On Success → Finish Task + Give Reward

Remove Queue in which we keep track for developers who worked on this task

→ On Failure:

1. Re estimate Time for this Task
2. For each developer in the Queue, return their points
3. Give second chance to the current developer

on Any Failure

↳ Developer must provide a feedback for the reasons he couldn't finish the task

↳ the system should collect feedback then try to learn from these feedbacks to enhance its time estimation

مطور المشروع developer. ليس هو feedback مع مدير المشروع
والمدير هو الذي يقيم المهارات skills

Senior Developer 11 هو مدير المشروع
مدير المشروع 11 هو مدير المشروع
مدير المشروع 11 هو مدير المشروع

Punishment :- Skill based

- Design ✓
- Code Performance ✓
- Core Language ✓

1. Constant Reduction Factor

* Quality Factor *

Importance of this skill

in each Task

70% Design 11 هو مدير المشروع

30% Code Performance

(0.7) (0.6) (1.0) → Reduce in Design

Quality

Constant

Factor

(0.3) (0.1) (1.0) → Reduction in Code Performance

Quality of

Code Performance

(3)

Evaluate Assignment →

Avg of Required Skills

~~Warning~~

→ If the Developer skill was less than certain threshold, we should send warning to him & his senior, so enhance his skill in this part

→ If the summation of the total skills was less than certain threshold, also we should send a warning to his senior & the Developer himself.

Rewards:

- Constant bonus Factor 100
- Importance of the skill
- Quality

$$\text{Result} = CF \times IS \times Q$$

Exceeding thresholds we should announce to his senior & his enhancement

Assignment:

1. Check on the Required skills
2. Summation on the values of these skills.

3. $(\text{Difficulty} \times \text{Time estimation}) \times \text{Factor}$

4. Assign higher values to best Employees

5. Separate Juniors from Seniors

Developer	
SKILL 1:	INT
SKILL 2:	INT
}	
SKILL D:	INT

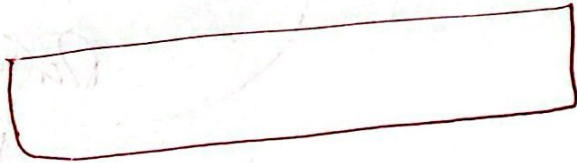
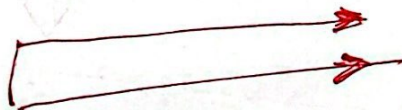
Cost:-

117-261

- # of Engineers to build the system $\rightarrow 12$
 - Time taken to build the system $\rightarrow 6$ Month
 - Time taken to test the system: $\rightarrow 1$ Month
 - Time taken for Monitoring system: $\rightarrow 1$ Month
- After releasing:

Resources needed

- GPUs 4-8
- Servers 1
- Developers ✓✓
- Machines \rightarrow # of developers + server



- Data gathering From Companies.
reflect. developers & time sheet

System Maintenance Correct

Models:

1. # Engineers
- a. BE: $\rightarrow 4-5$ ✓
- b. FE: $\rightarrow 5-6$ ✓
- c. Testers: $2-3$ ✓
- d. ML: $12-10$ ✓

multiple engineers on common models

1. Extract tasks From plan desc.
2. Time & Difficulty Estimation
3. Tasks Assigner.

[5]

Web Application

Front End UI



Back end &
Data Base



Feed back
sentiment
Analysis

Model:

Plain Text



Task
Extractor

Tasks

Time & Prio
Estimator

Task
Assigner
Model

Detail Task

Database
set



UI → Front End

Server Side Backend

↳ Database ↳ Series
↳ Departments ↳ Time
↳ Tasks

[8]

Limitations:-

we

Scanned with CamScanner

Market Research: → Competitors & what makes us
Different

- | | |
|----------------------------|---|
| 1. Prepare slides | 5 Deadlines & Requirements well understanding |
| 2. think about limitations | |
| 3. Market Research | |
| 4. Architecture Better UI | |
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