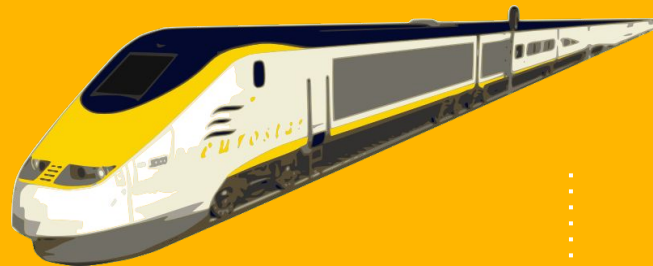


When Speed Matters



Lessons in **Temporary Solutions** from real world landmarks



Amir Safavi
Staff Software Engineer at Google
@thesportygeek

Technical debt







Good tech debt

Intentional development choices that prioritise **speed** or **short term gains**, knowing they **may need rework** later

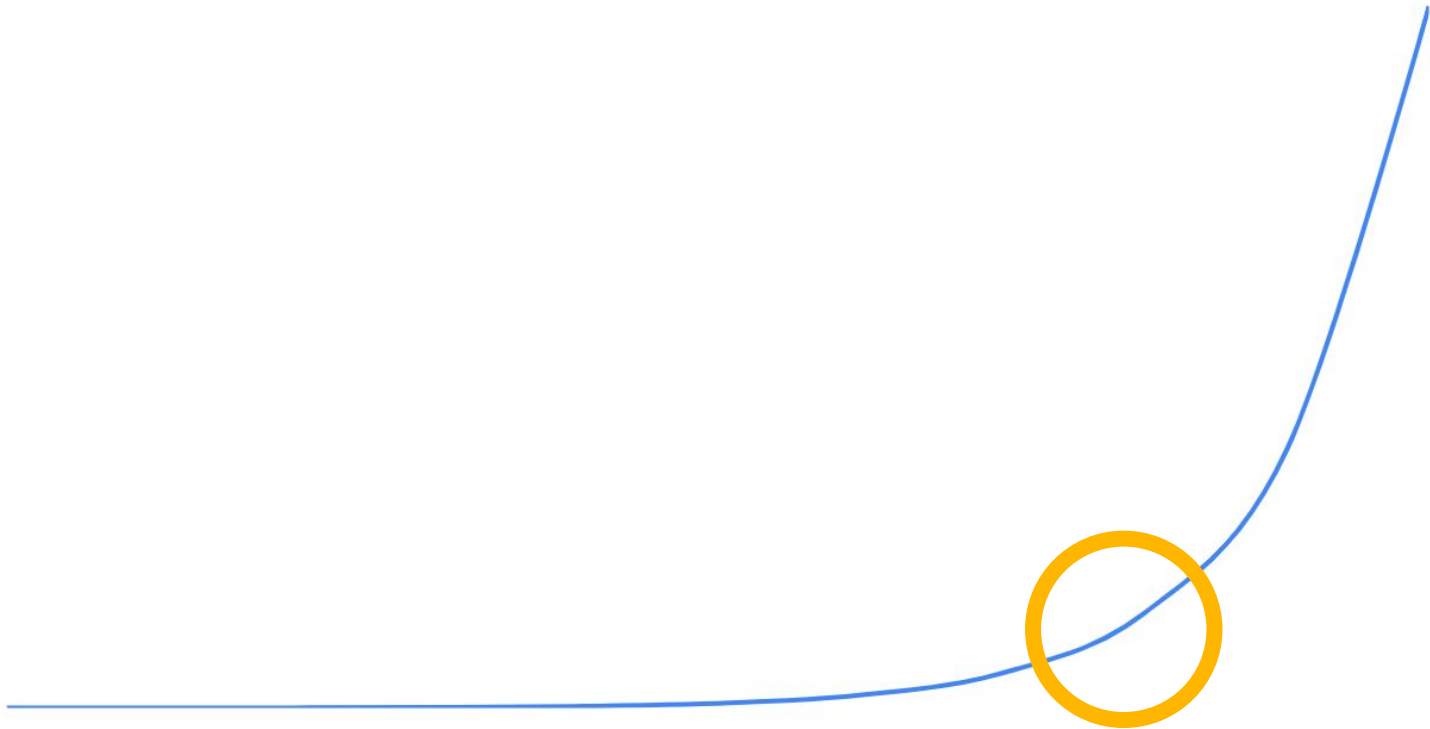


Good tech debt

NOT an excuse add bad code or ship half-baked work

It also doesn't happen by accident

Future cost



Speed



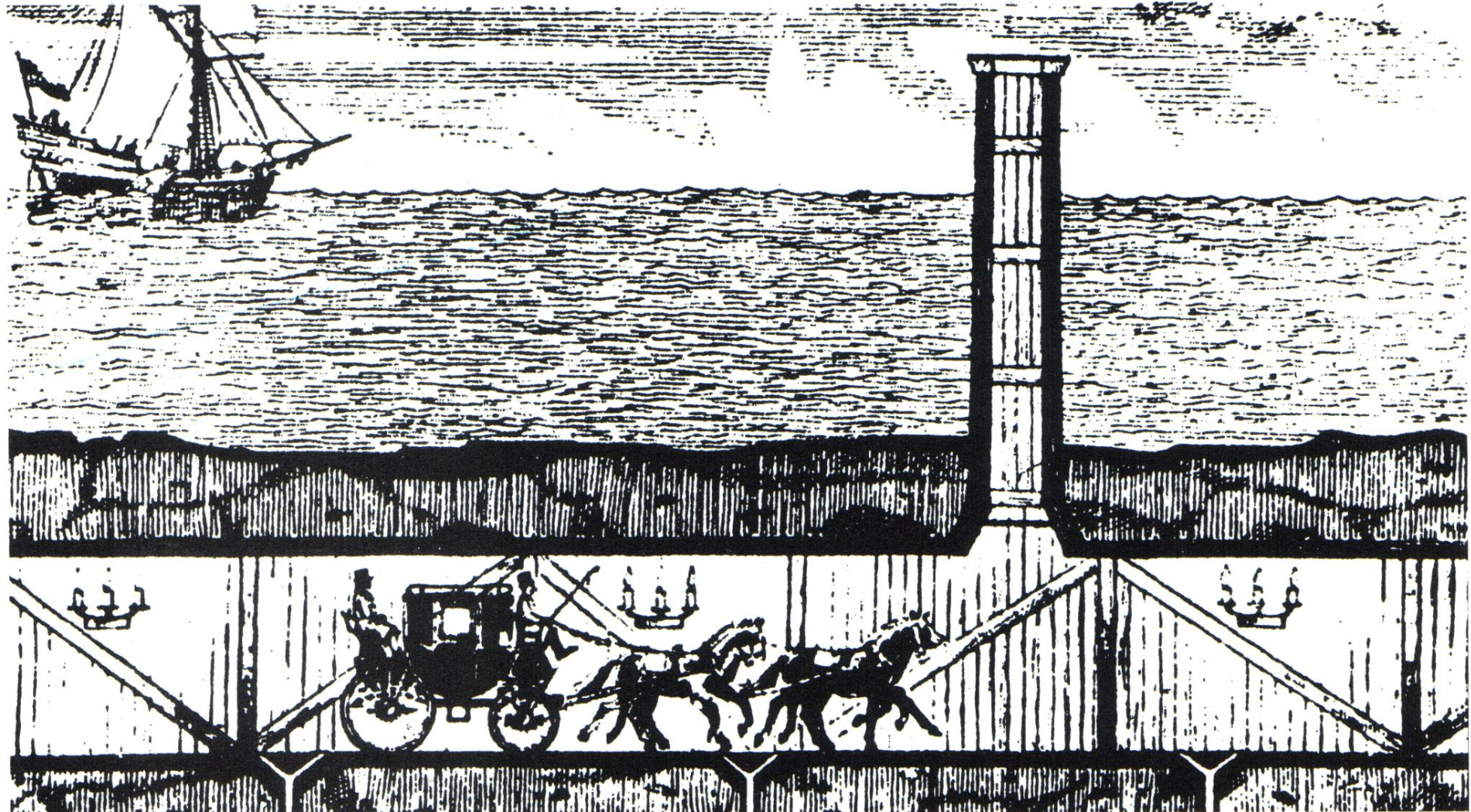


Image courtesy of The Public Domain Review; <https://publicdomainreview.org/essay/the-early-history-of-the-channel-tunnel/>

EUROBRIDGE-The 21st

...reached the United Kingdom...
...to be used for...
...with this programme from...

...demonstrated the...
...to one...
...and UK...

...double handling of traffic...
...within the limits of all...
...with a parallel...

...has been developed and...
...to provide the operation...
...of a two-way suspension bridge...
...with a single track road tunnel.

...attractively...
...and rail...
...feasible...
...of a rail tunnel...

The Bridge

...spanner...
...The end...
...of a...
...to the...

...of a...
...to the...

...is 20 metres above high water level...
...at the...
...with...

...and...
...to...
...the...
...which can be...

...and despite the negligible...
...to...
...of full operating speed...

The Tunnel

...proposes a...
...which will be based on...
...of the sea bed.

...would...
...to be...
...of a rail tunnel...

TRAFFIC FLOW

Four levels of traffic will be accommodated in an all-weather shell, with slip road interchanges between levels at piers.

At top and bottom two twin lane auxiliary highways with additional hard standing sandwich the two main four-lane highways with further hard standing, walkways and emergency exits.

Controlled lighting, frequent matrix signs, emergency telephones, closed circuit television and full recovery services combine an ideal driving environment with security for drivers and vehicles alike.

Bridge Shell

The bridge shell is made from Superferro in a semi-rigid structure. Superferro is a special concrete developed for its high strength/weight ratio and its vulnerability to corrosion by the most severe chemical spillage. More than 15 years' experience has been gained with this composite structural material.

Ductal fibres are built into the shell to reduce pressure on the windward side and avoid vibration to boats.

Decks are of welded steel coated with Estercote, an ideal lightweight surface, highly resistant to corrosion as has been proved in more than 15 years' service.















Common **pitfalls** when managing tech debt

(in both landmarks and software)



1. The **illusion** of completion

2. Hidden

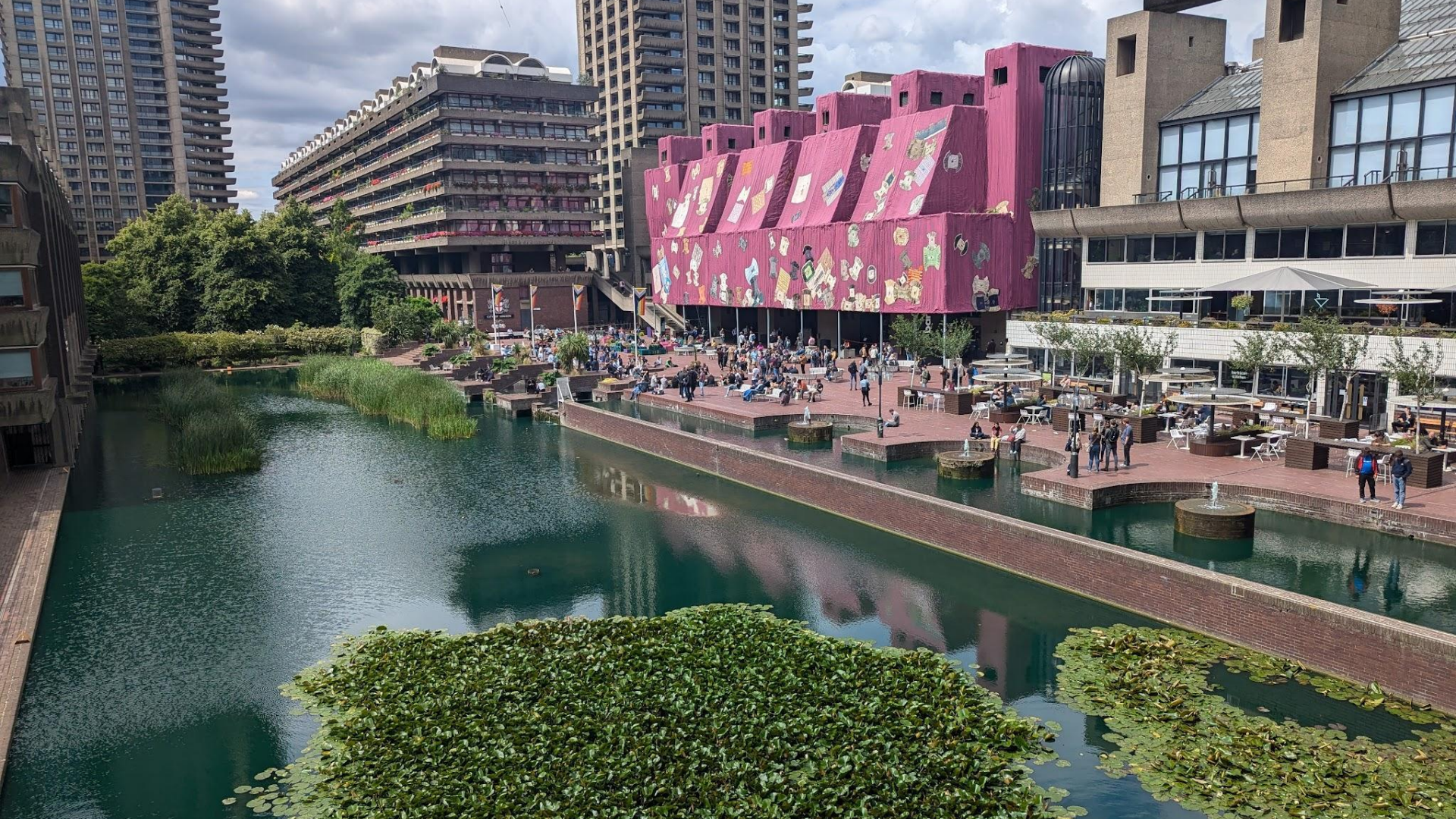


costs

3. A lack of **strategic** investment



4. The danger of complacency



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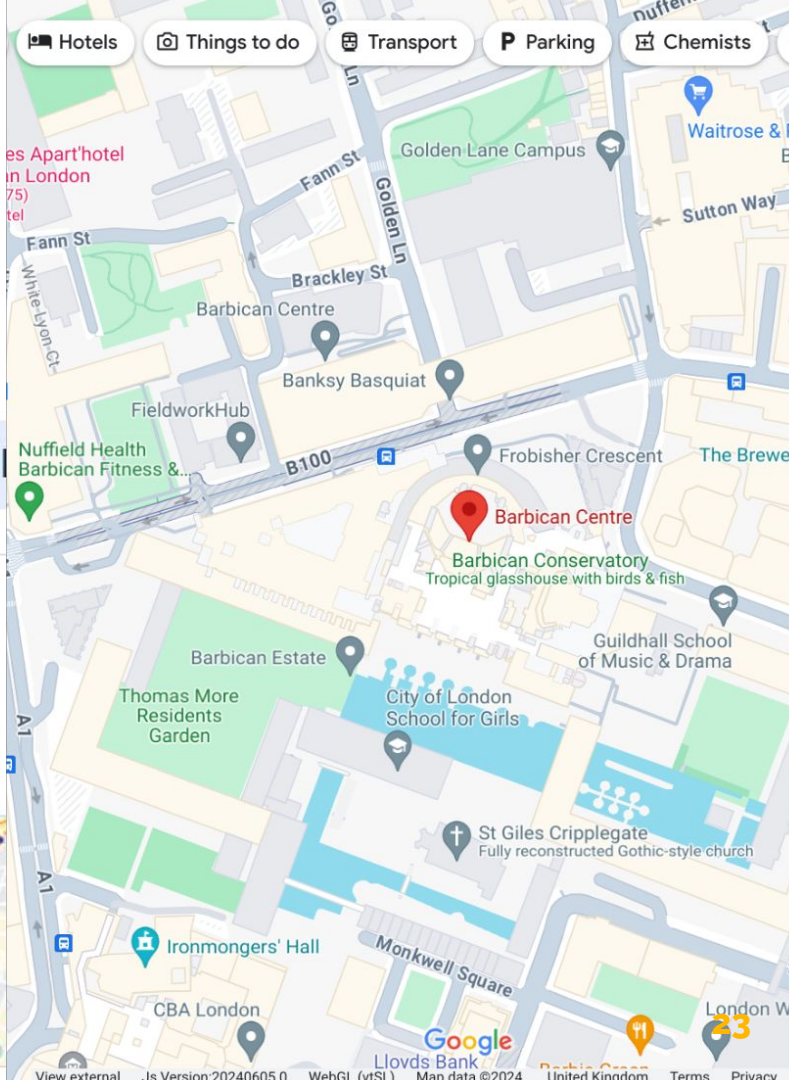


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Barbican Centre





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(owner)

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services
Right?

READ AND REPLY

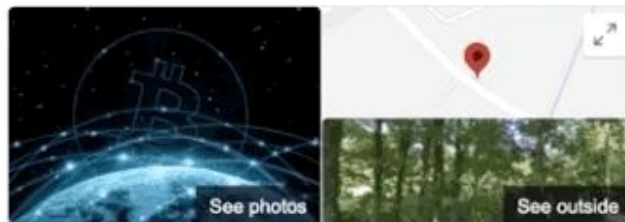
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Crypto Consultancy

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Province: Leinster

Phone: 020 8000 0123

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- Edit services

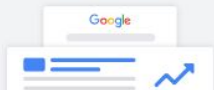
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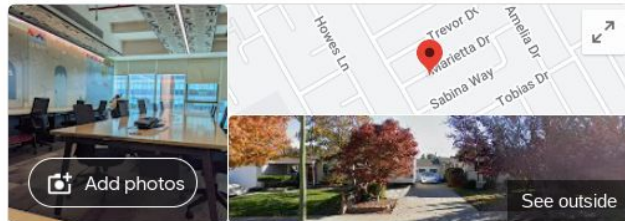


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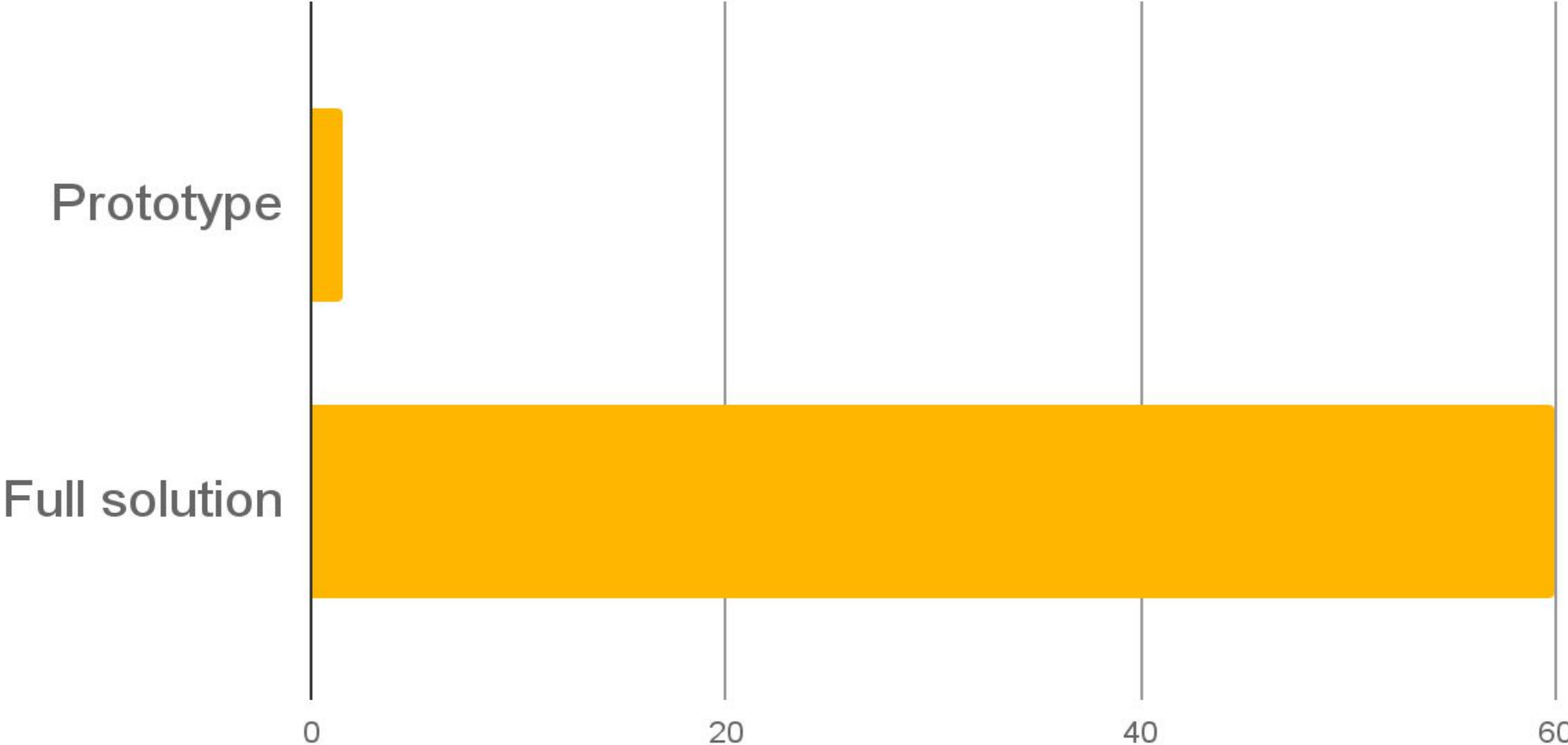
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Eng cost comparison



Recap: Some tech debt can be **good**, if it....

1. Is planned
2. Enables innovation
3. Reduces investment risk





Destination	Time	Status	Gate
London Heathrow	10:00	On Time	10
Paris Charles de Gaulle	10:15	Delayed	11
Amsterdam Schiphol	10:30	On Time	12
Brussels South	10:45	On Time	13
Frankfurt	11:00	On Time	14
Munich	11:15	On Time	15
Zurich	11:30	On Time	16
Geneva	11:45	On Time	17
Barcelona	12:00	On Time	18
Madrid	12:15	On Time	19
Rome Fiumicino	12:30	On Time	20
Naples	12:45	On Time	21
Palermo	13:00	On Time	22
Catania	13:15	On Time	23
Syracuse	13:30	On Time	24

20

21

22

24





Thanks!

I'll be at the networking mixer
for questions

You can also tweet me [@thesportygeek](https://twitter.com/thesportygeek)