

# GOOS

XPDays 2011



# 3 Styles of TDD

- **Inside out - Unit test first**
- **Middle in - API first**
- **Outside in - GOOS**

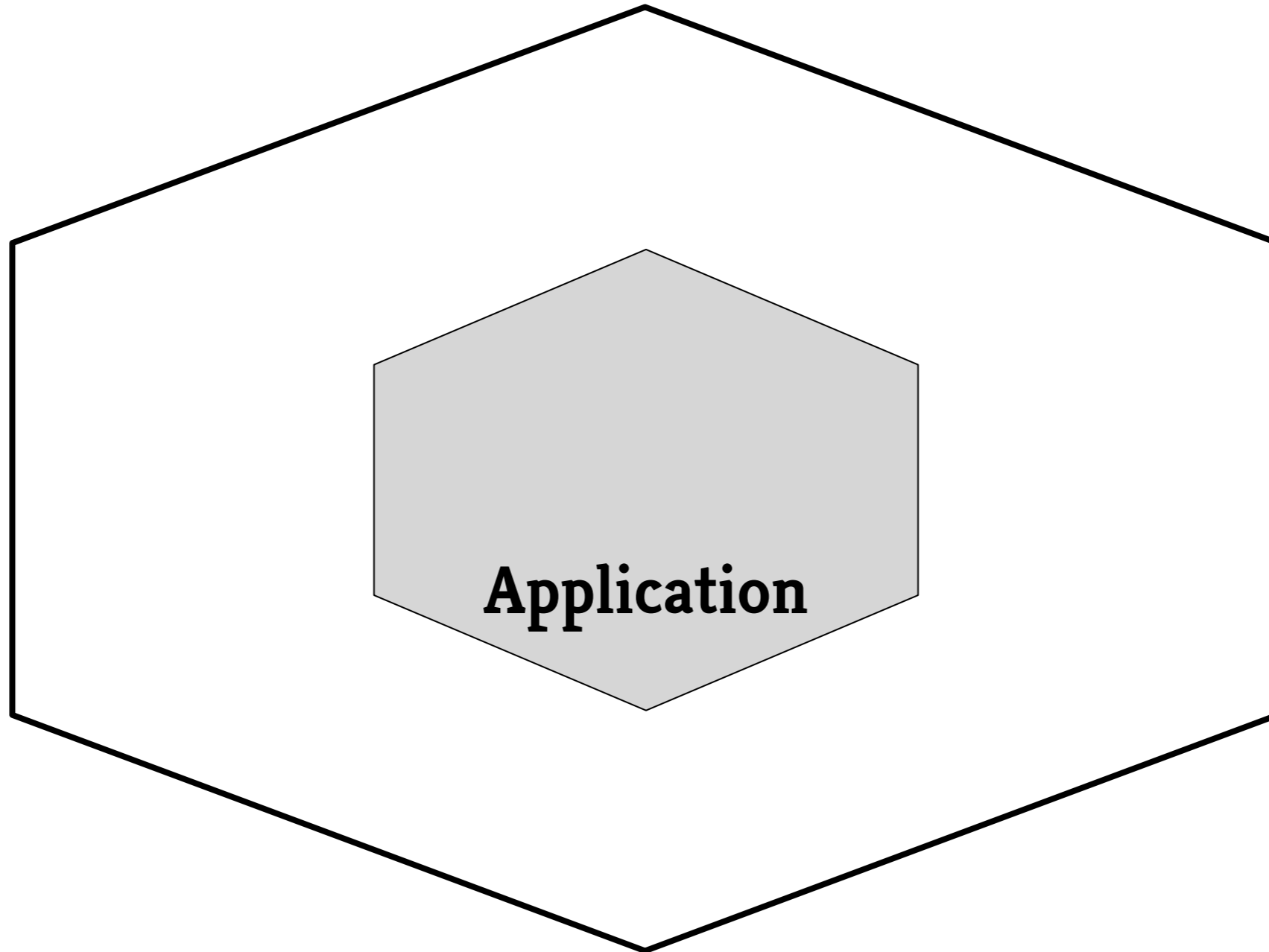
# What does Wikipedia say?

**In Test-Driven Development each new feature begins with writing a test.**

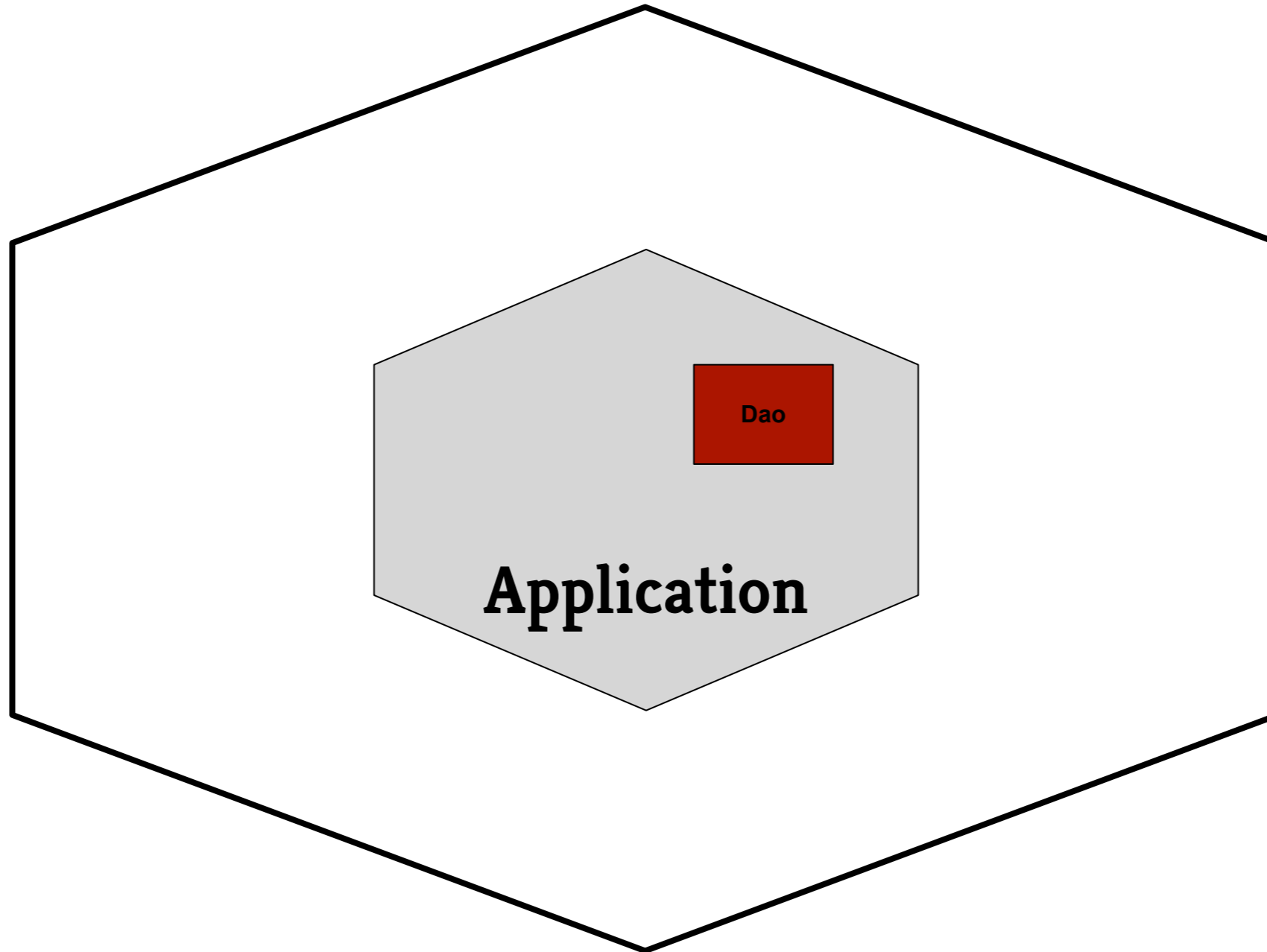
From Test-Driven Development by Example - Kent Beck

# Inside out

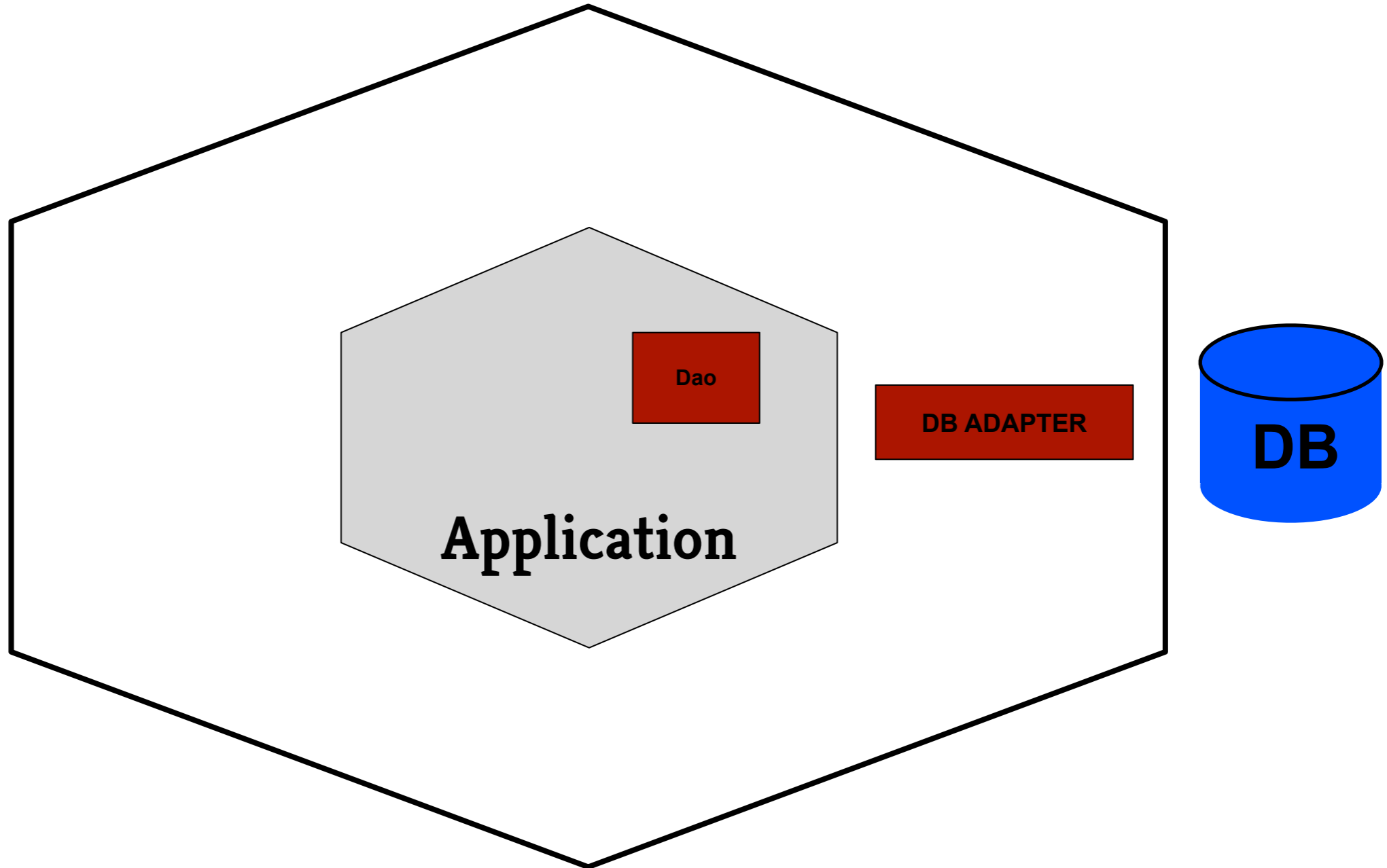
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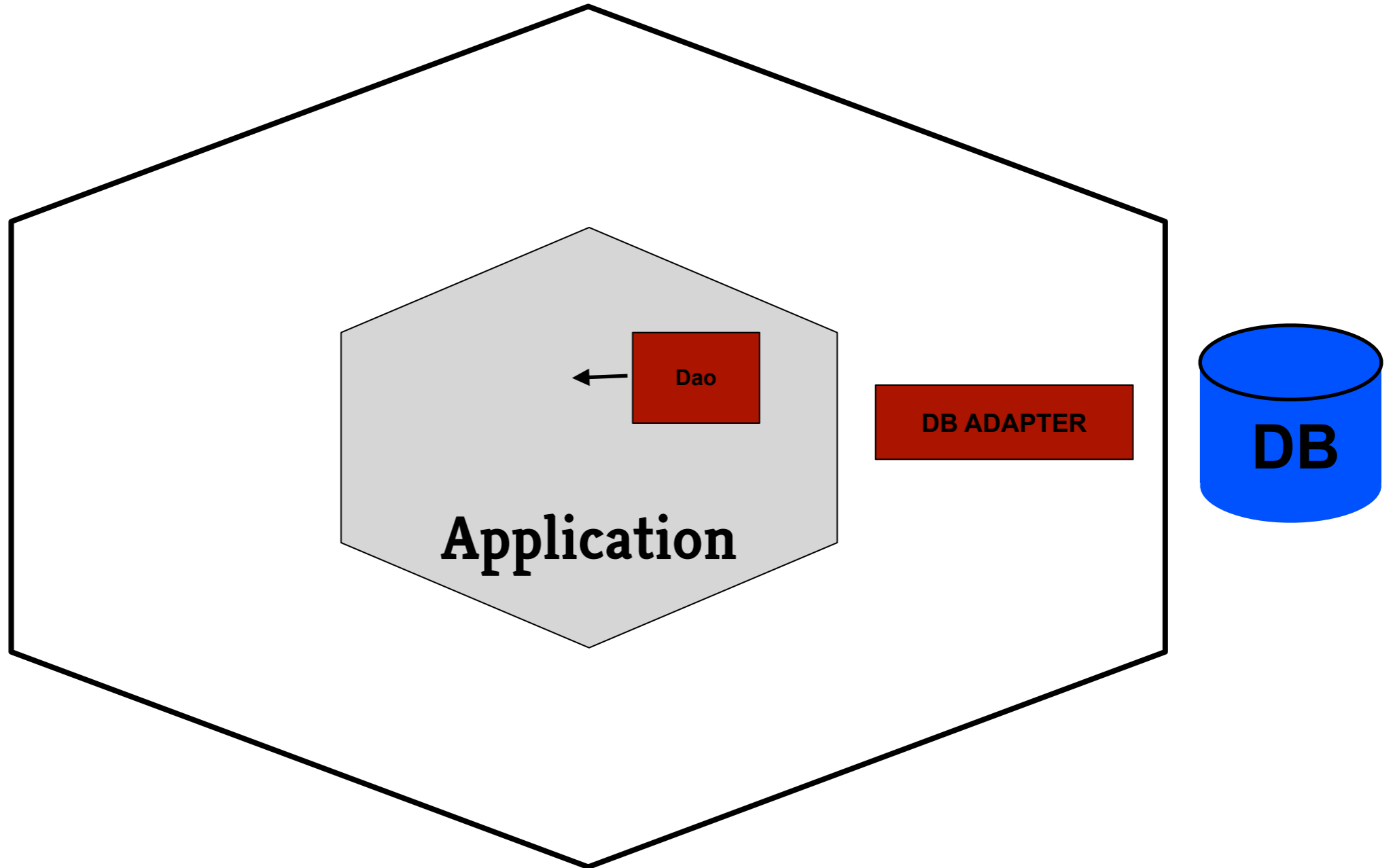
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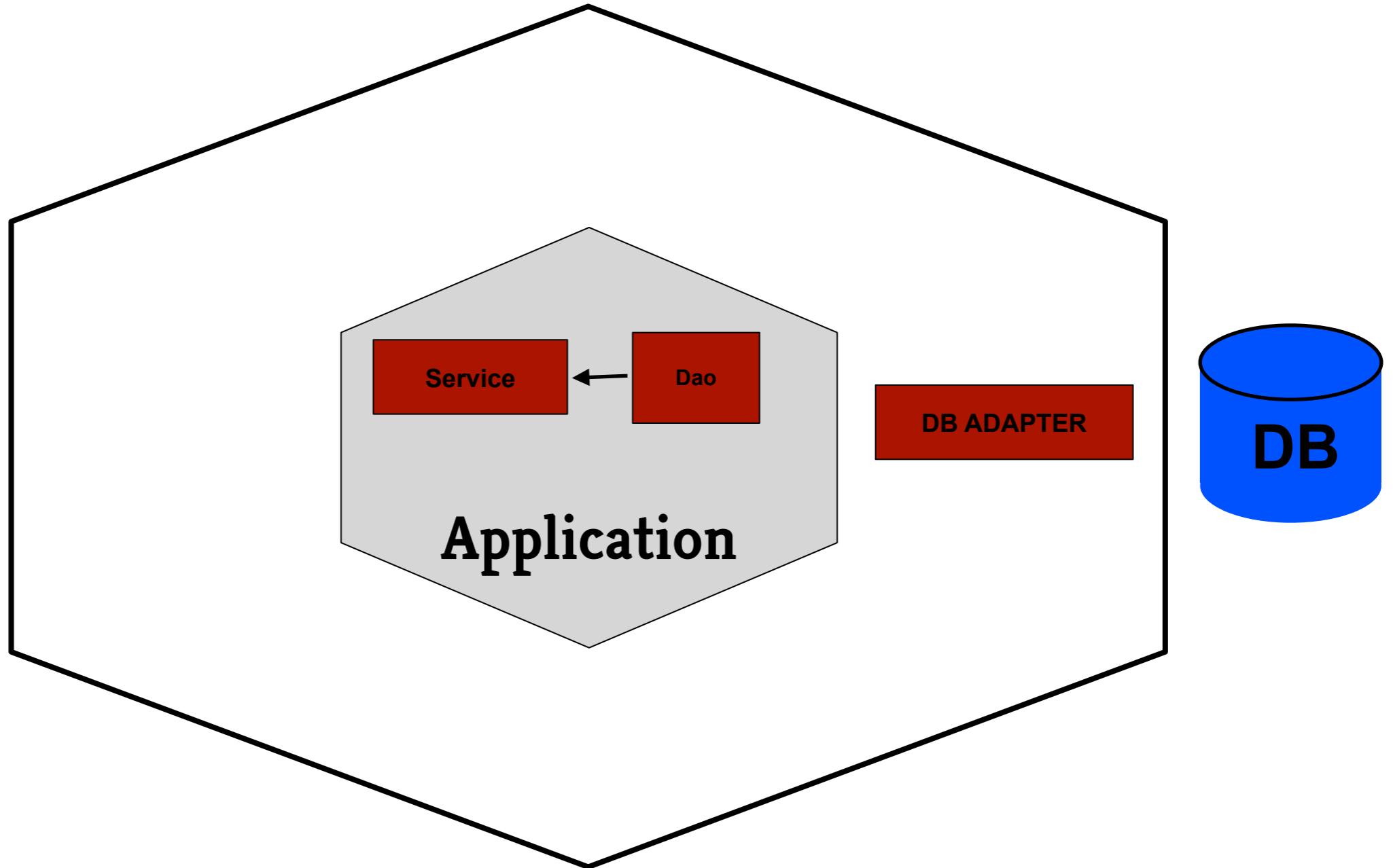
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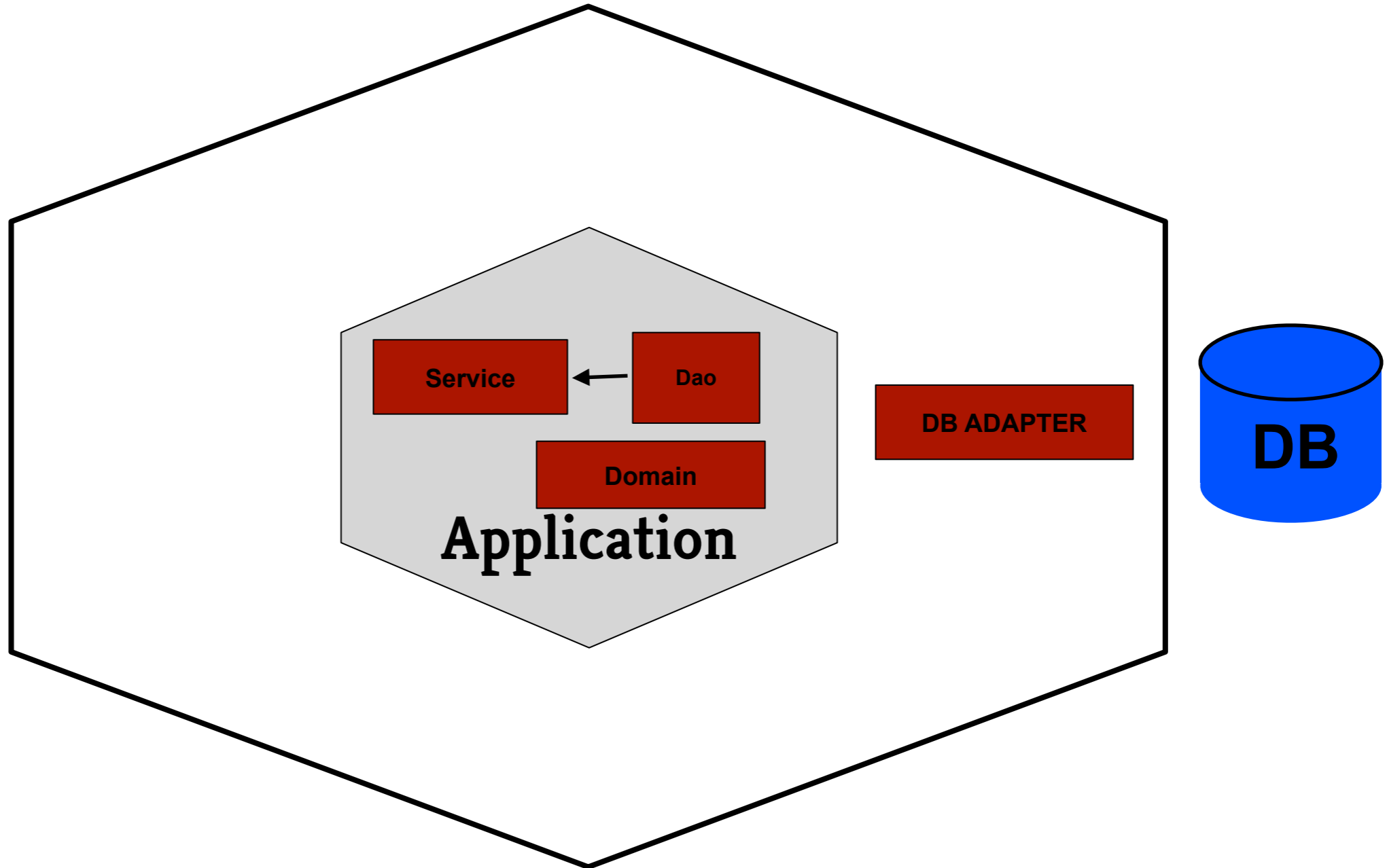
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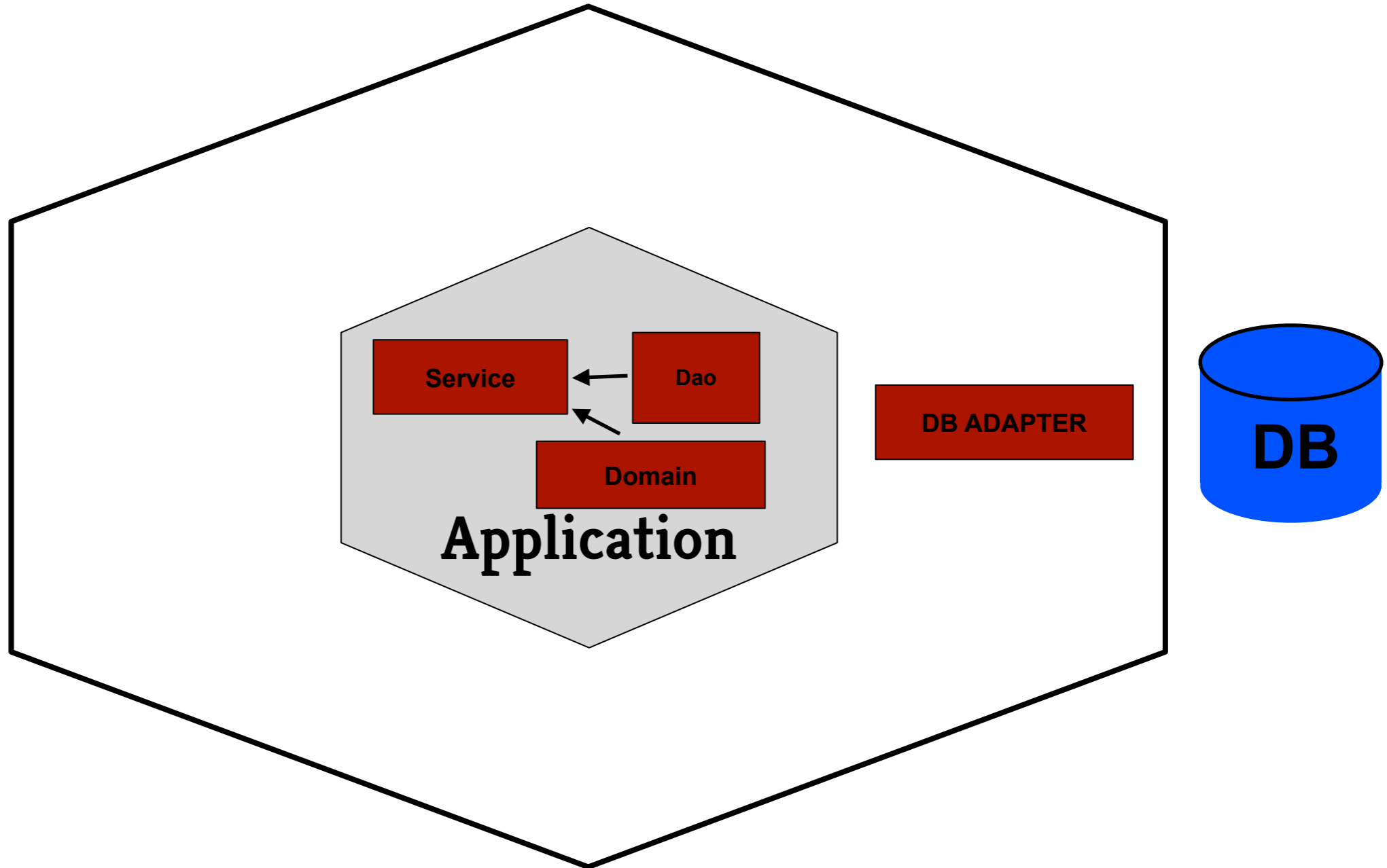
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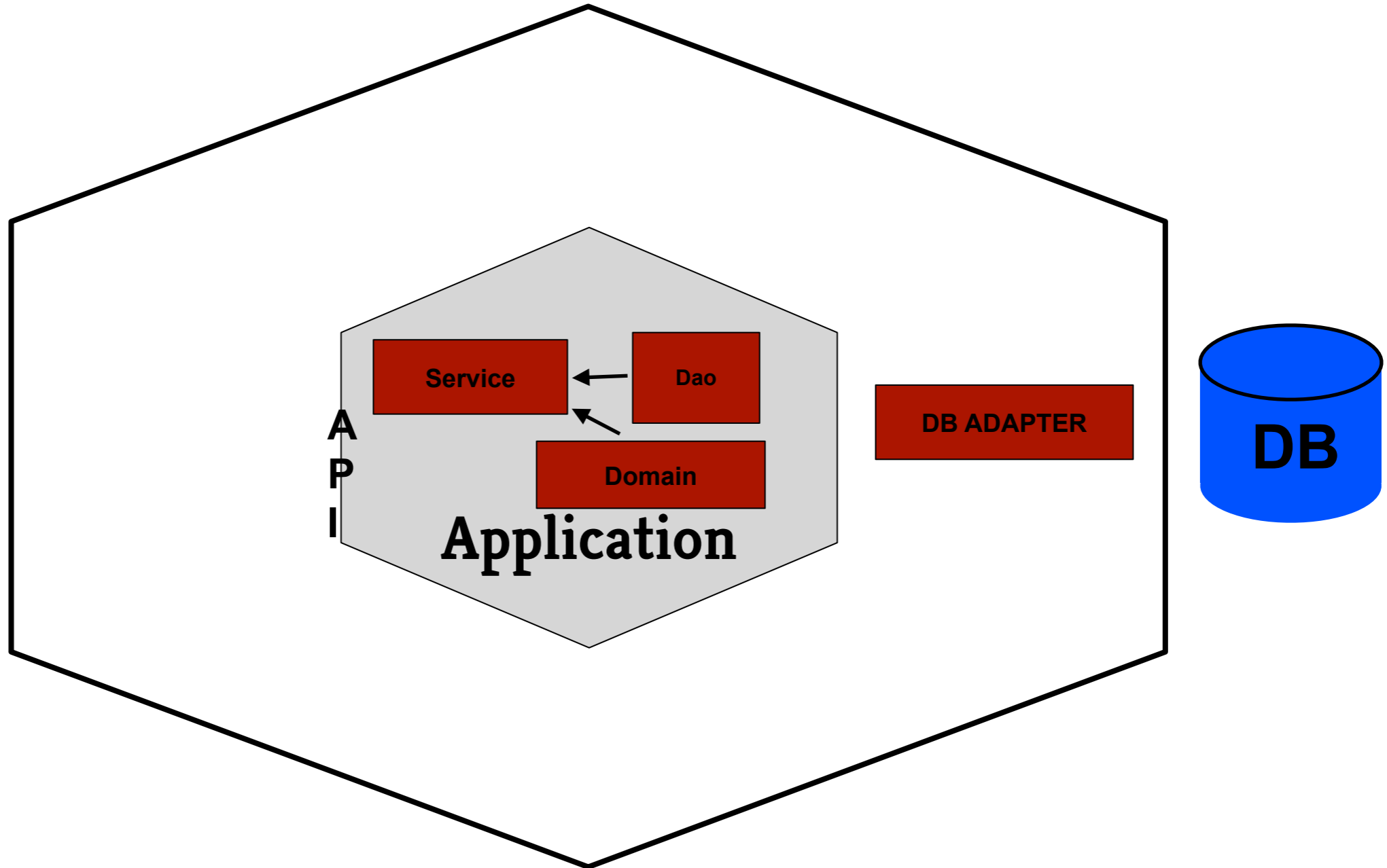
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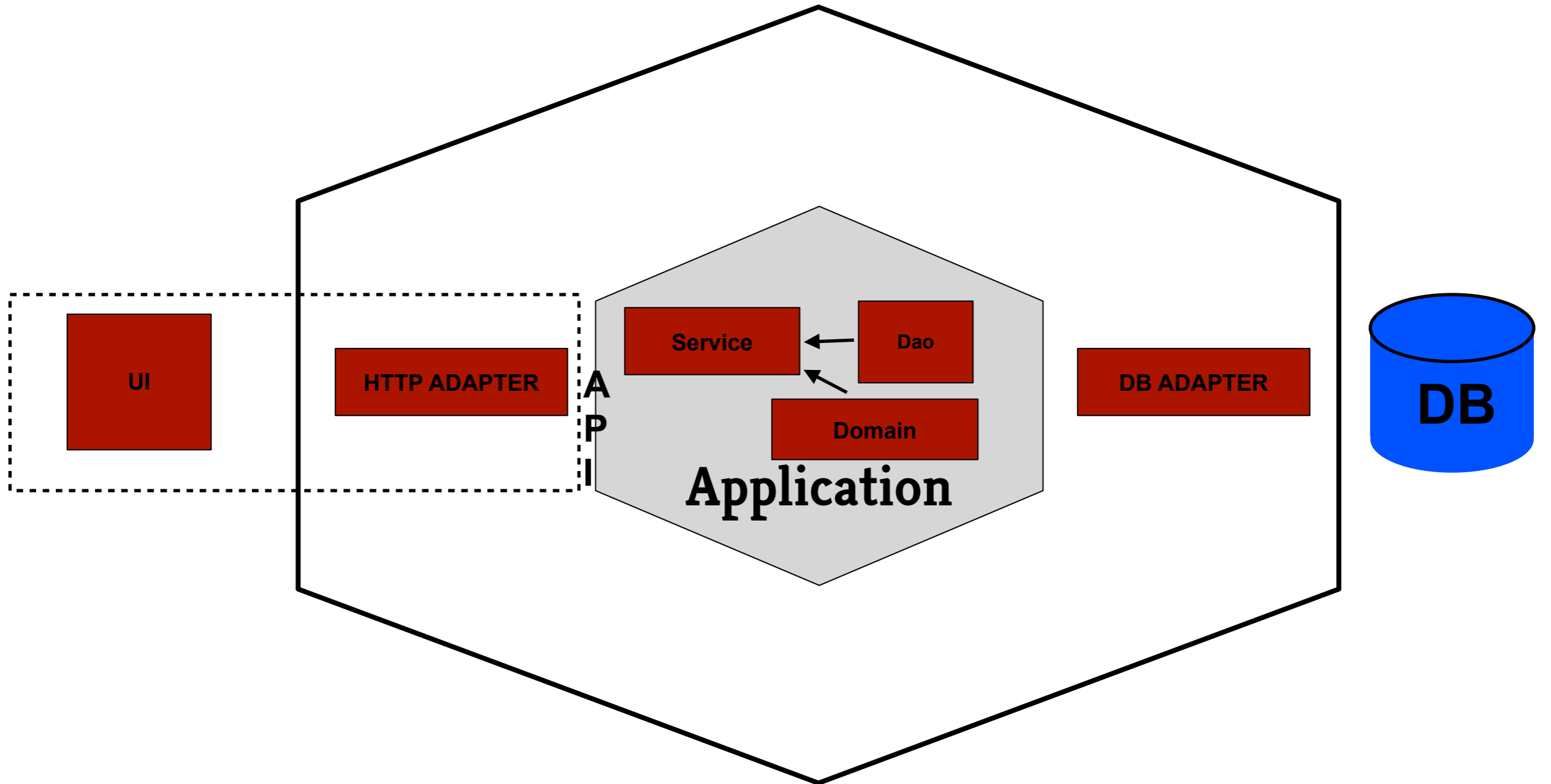
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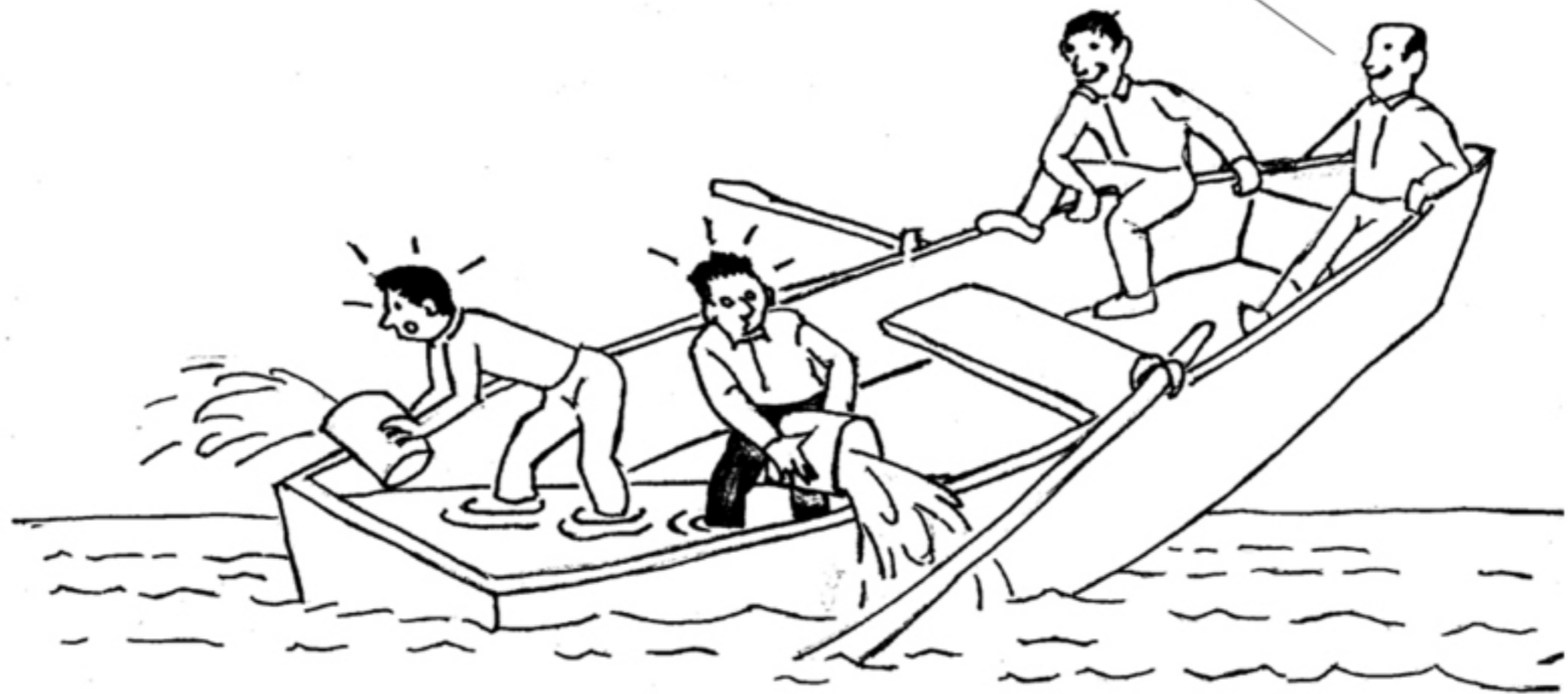
# Inside out



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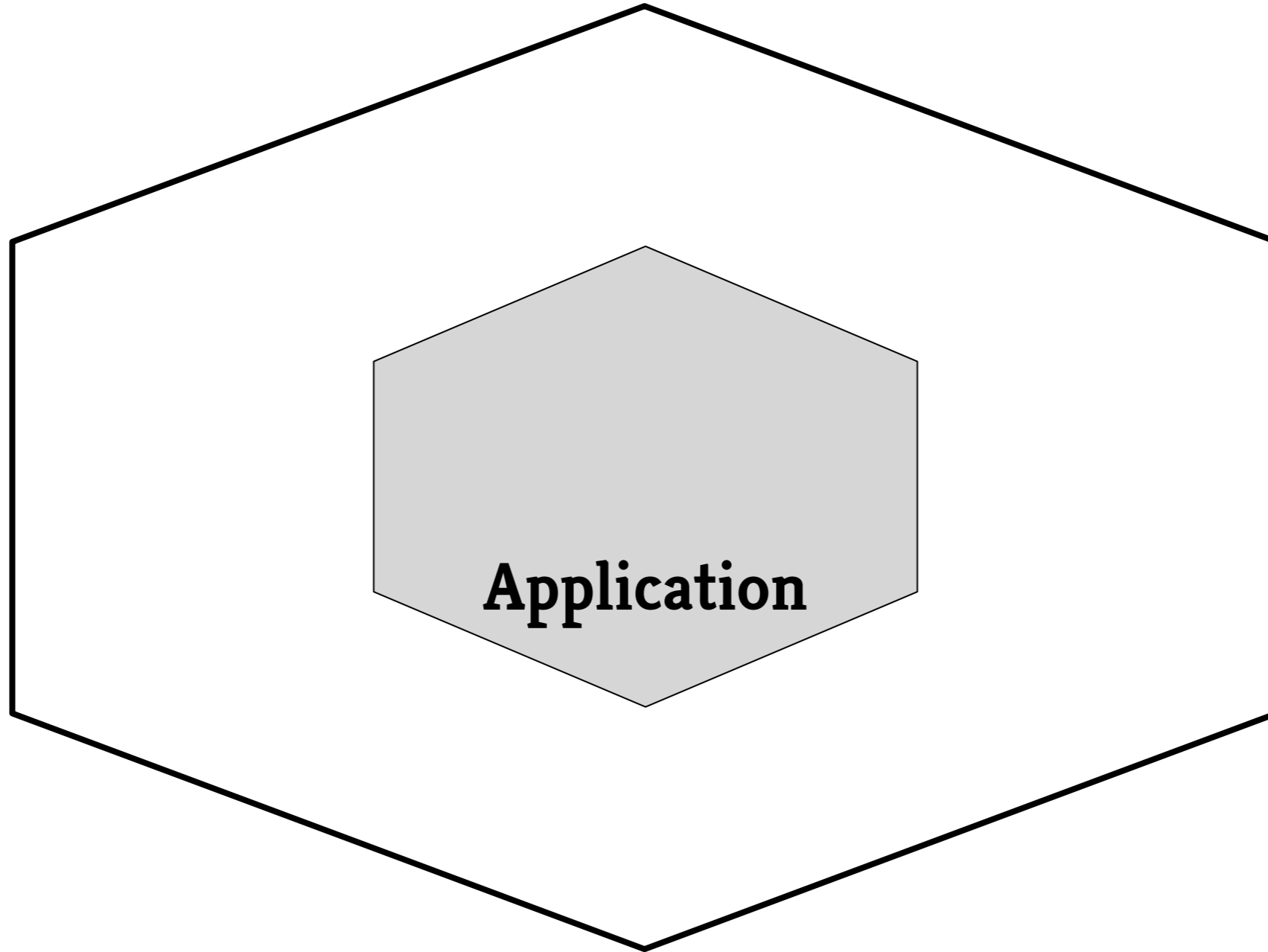


Sure glad the hole isn't at our end.



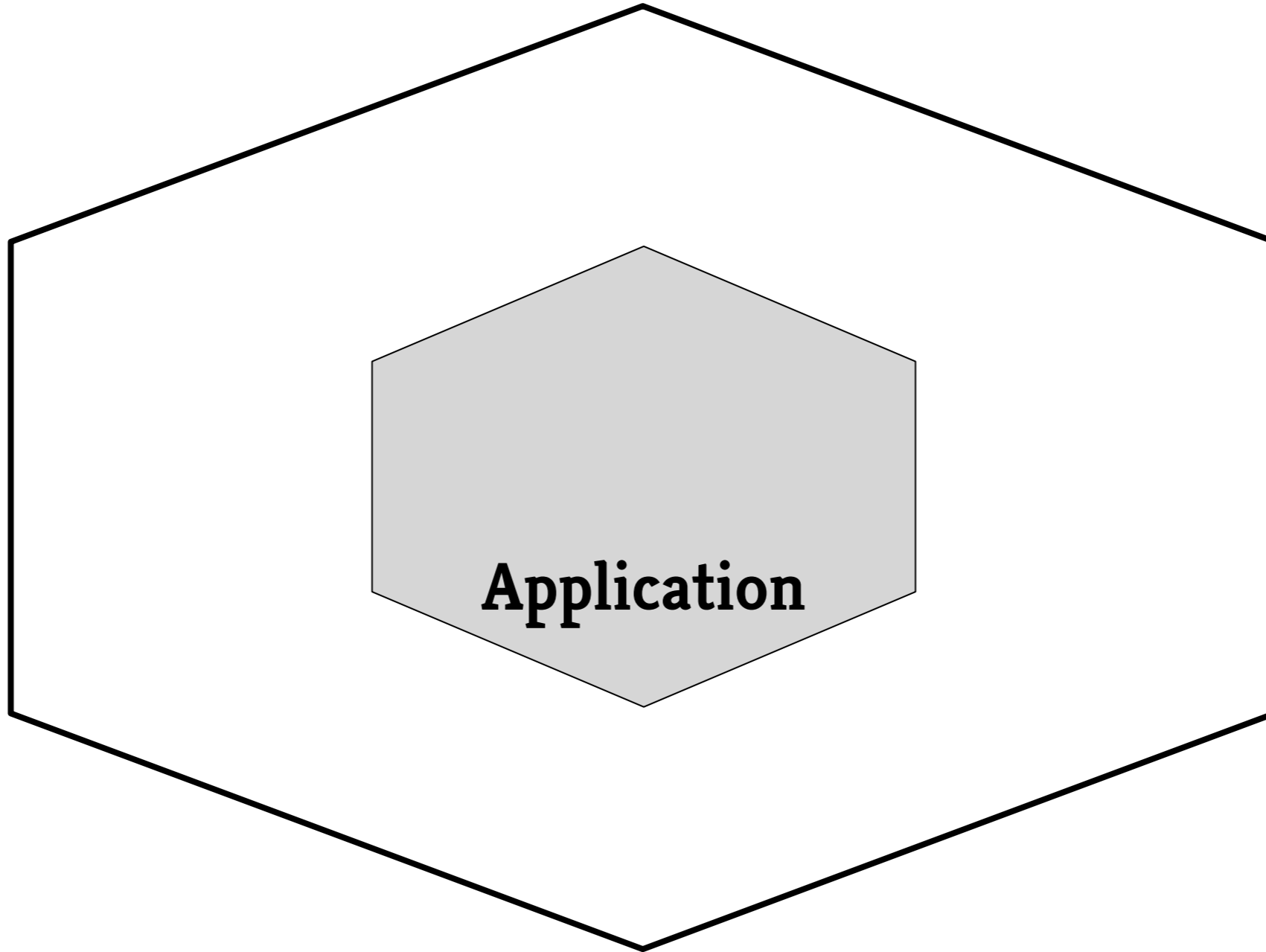
# Middle in

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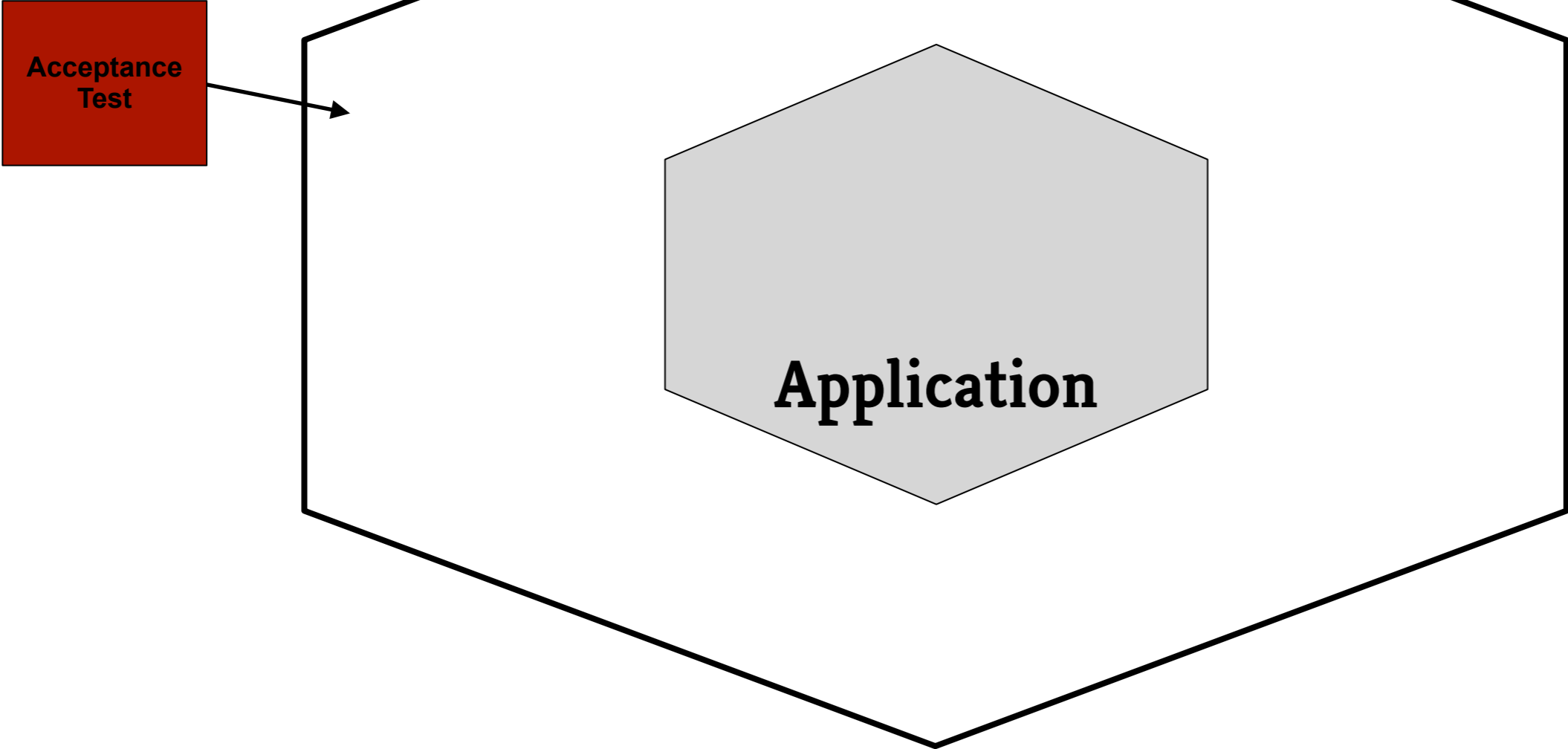


# Middle in

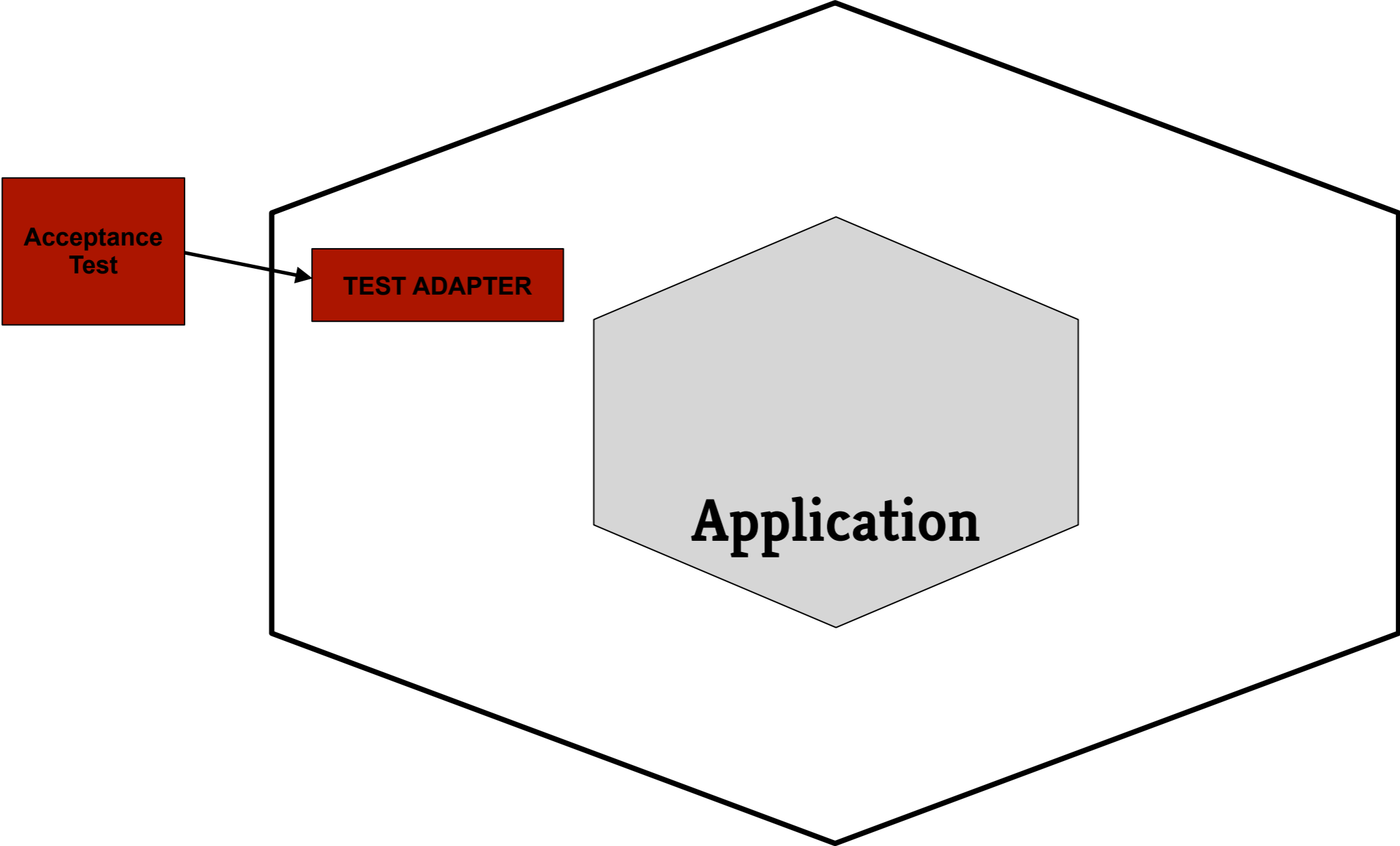
Acceptance  
Test



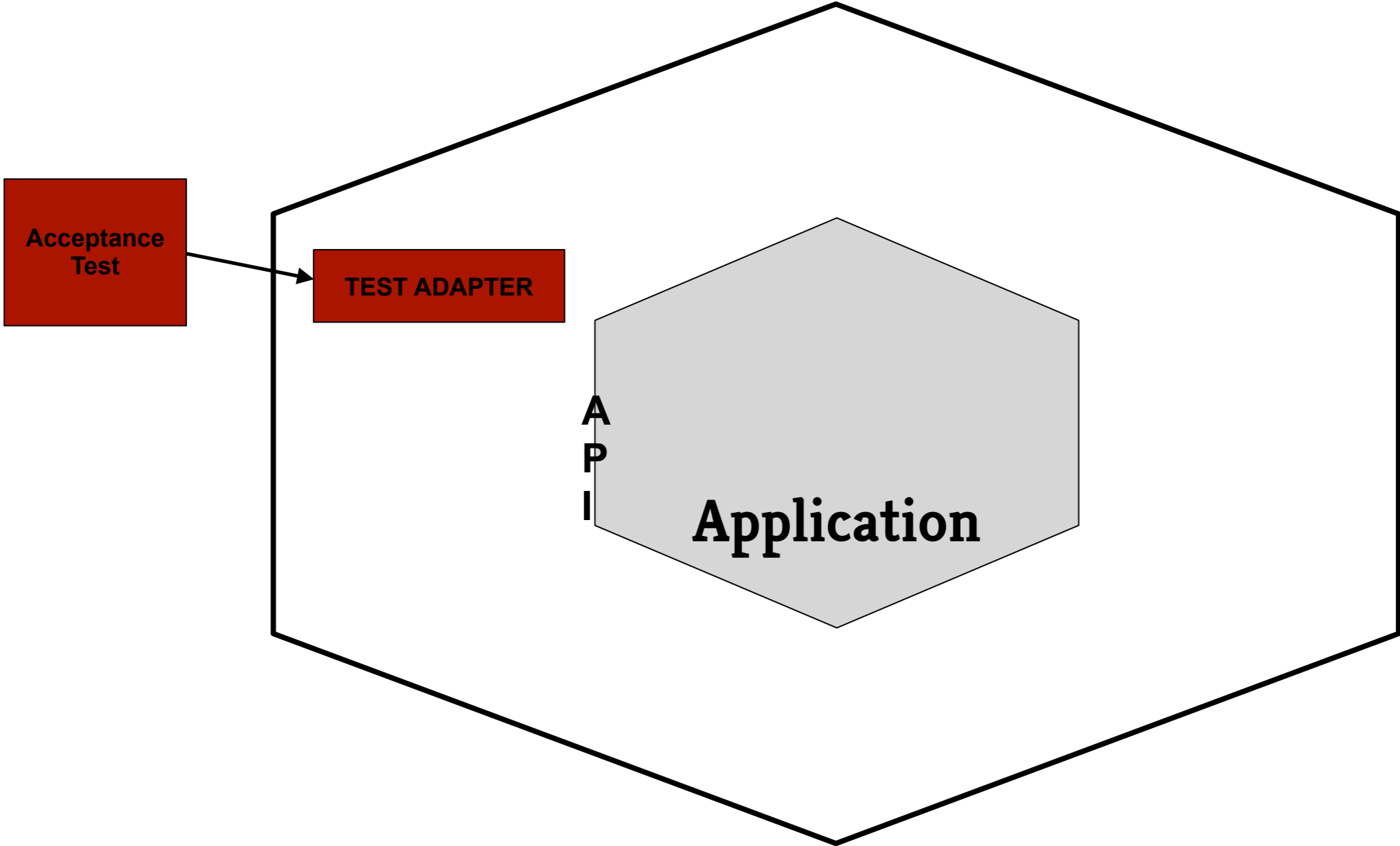
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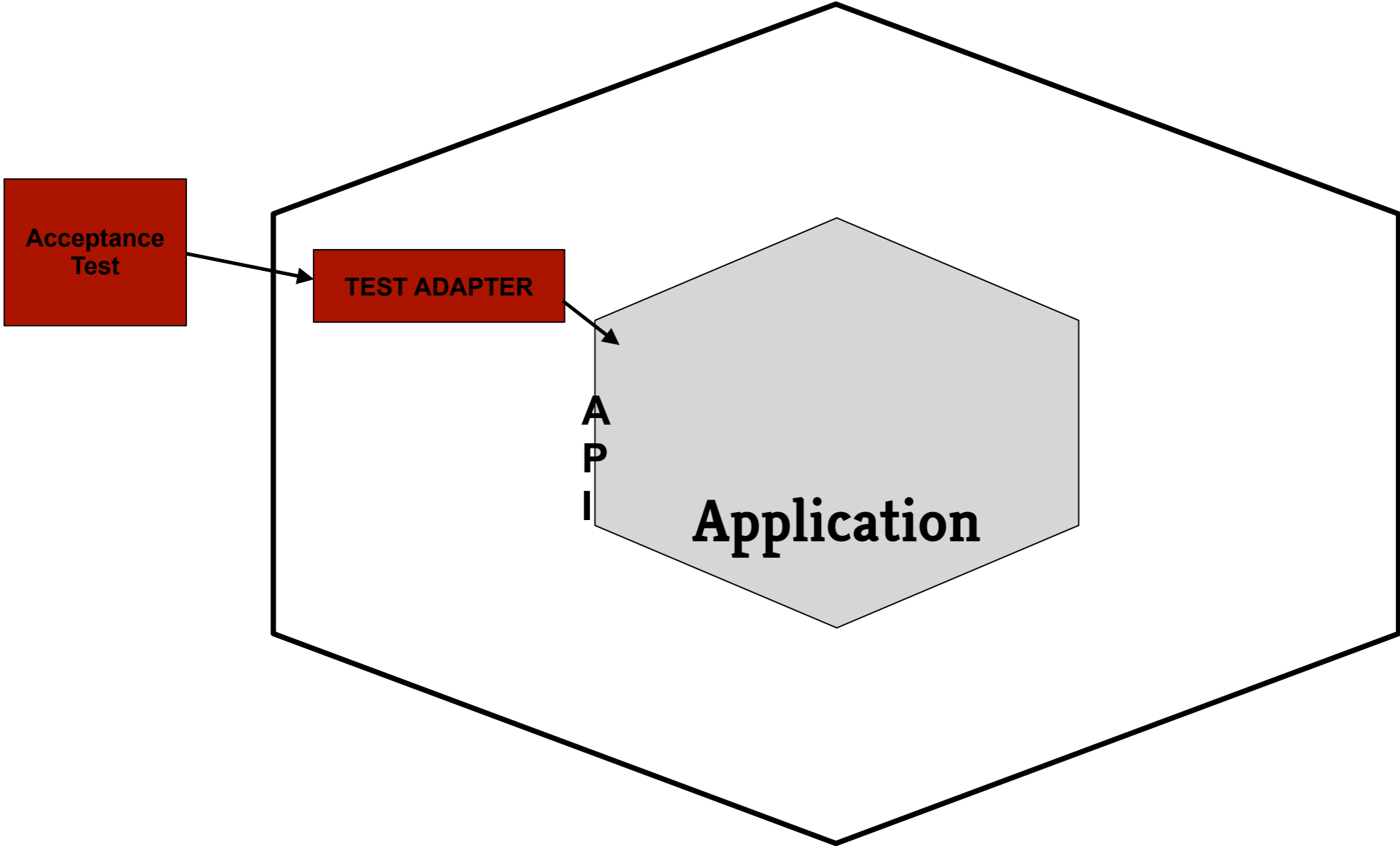
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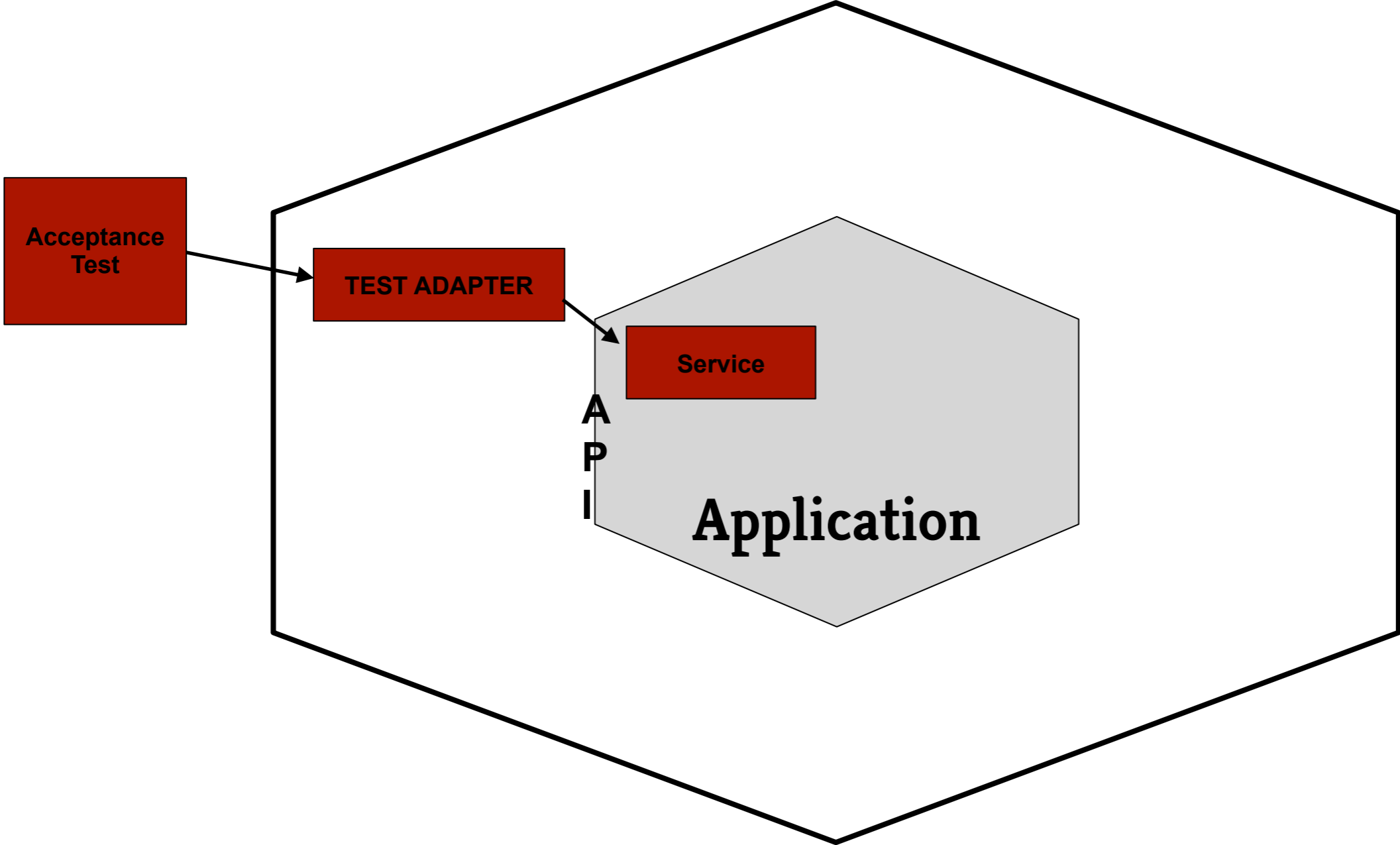
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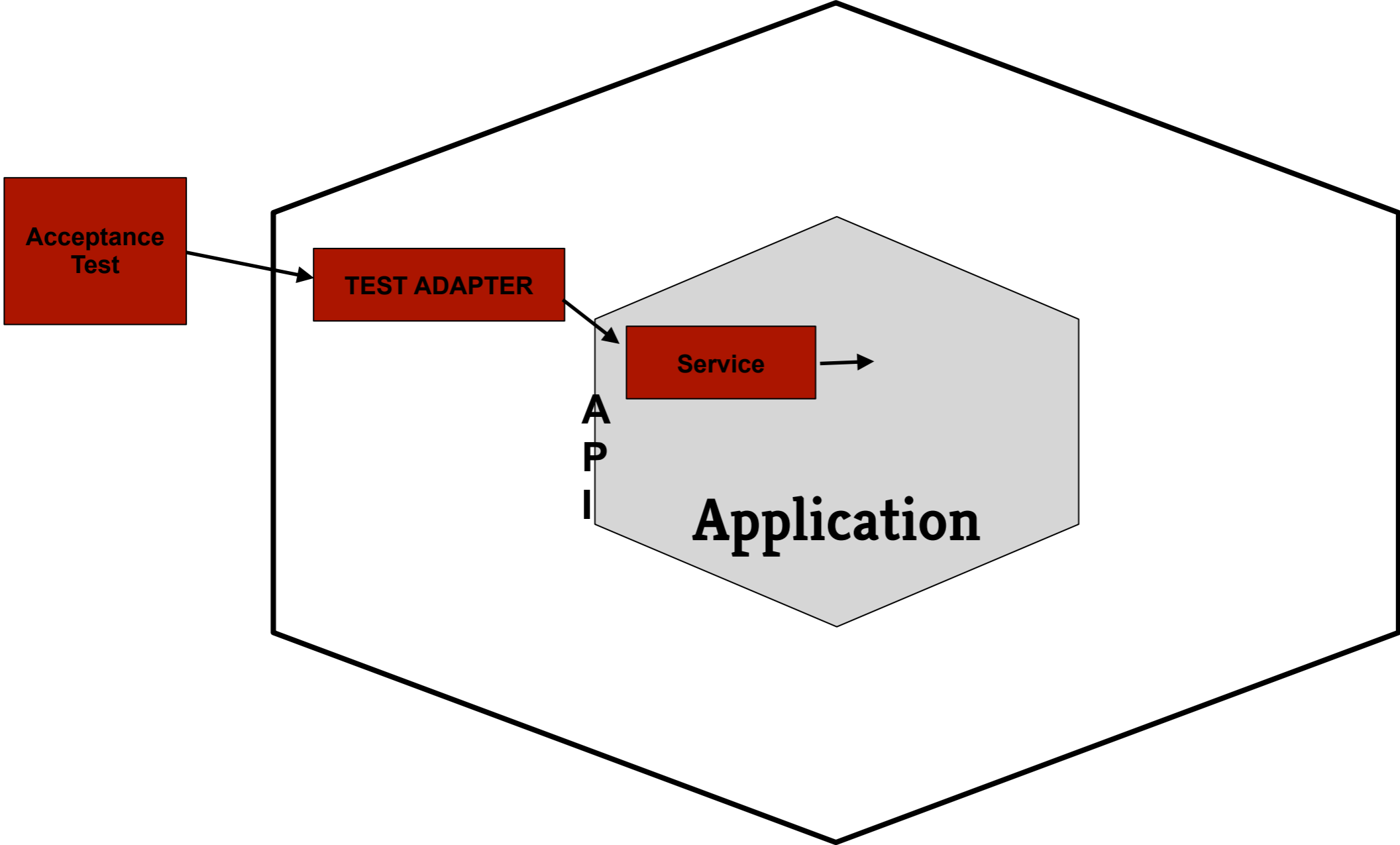
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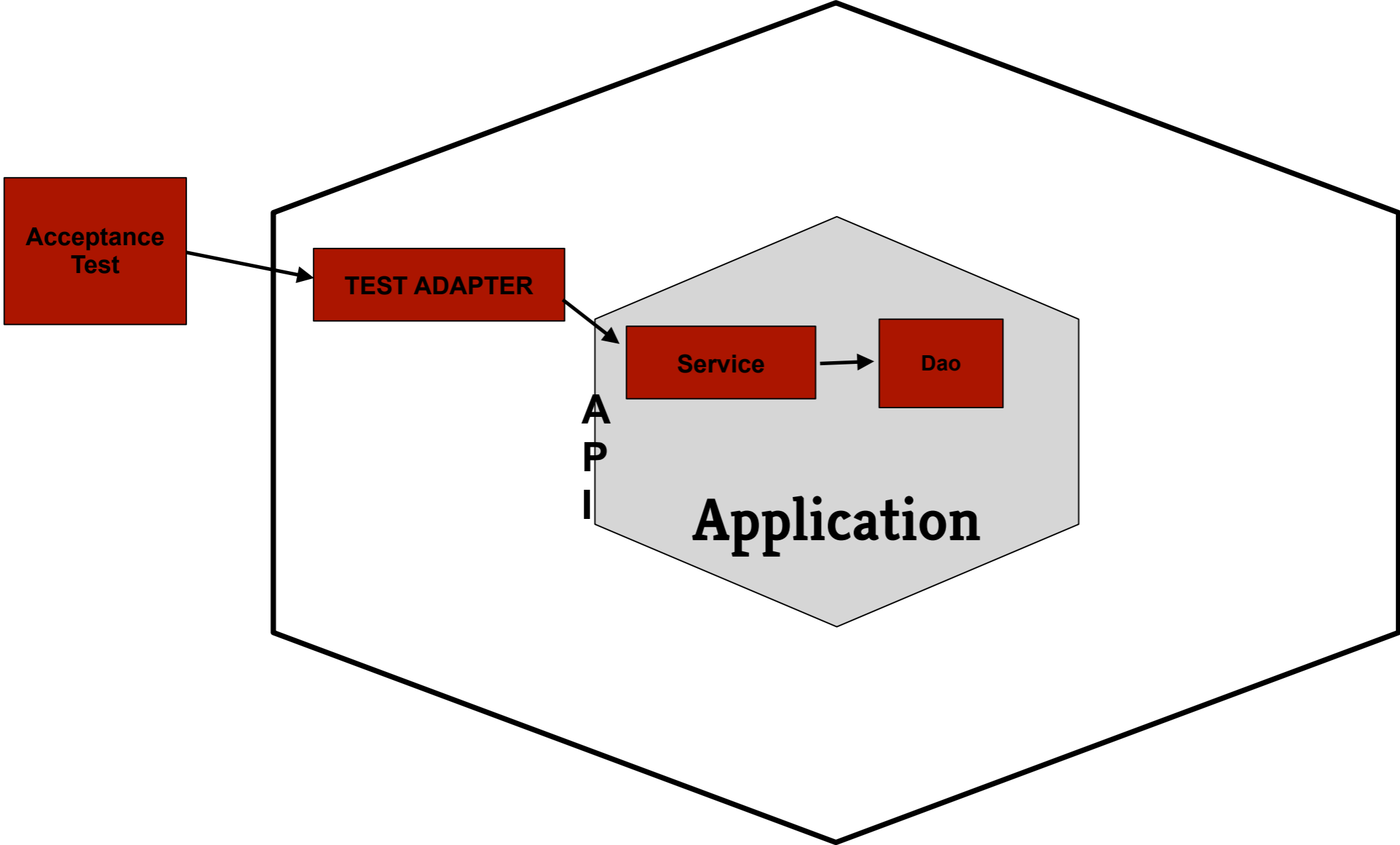
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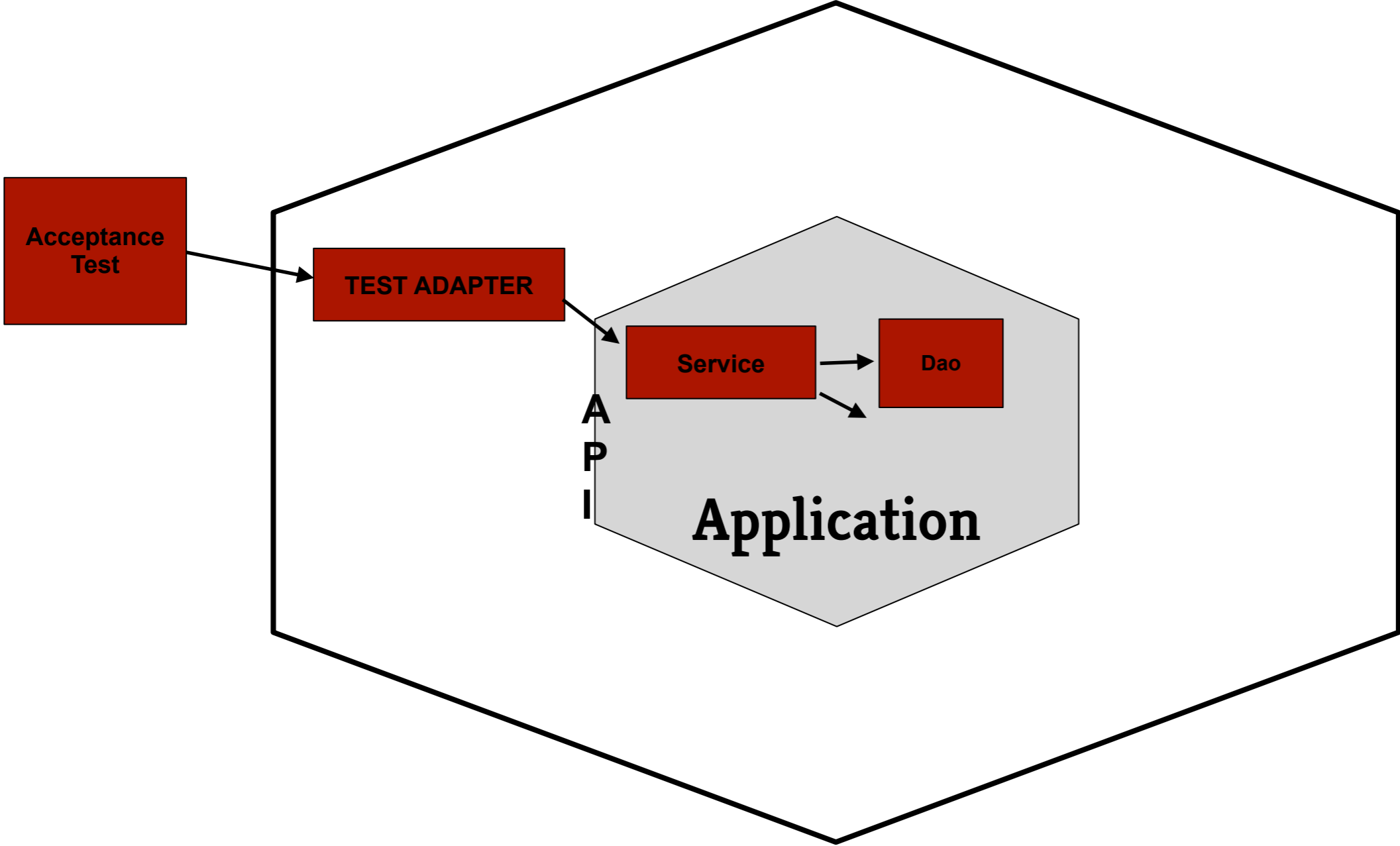
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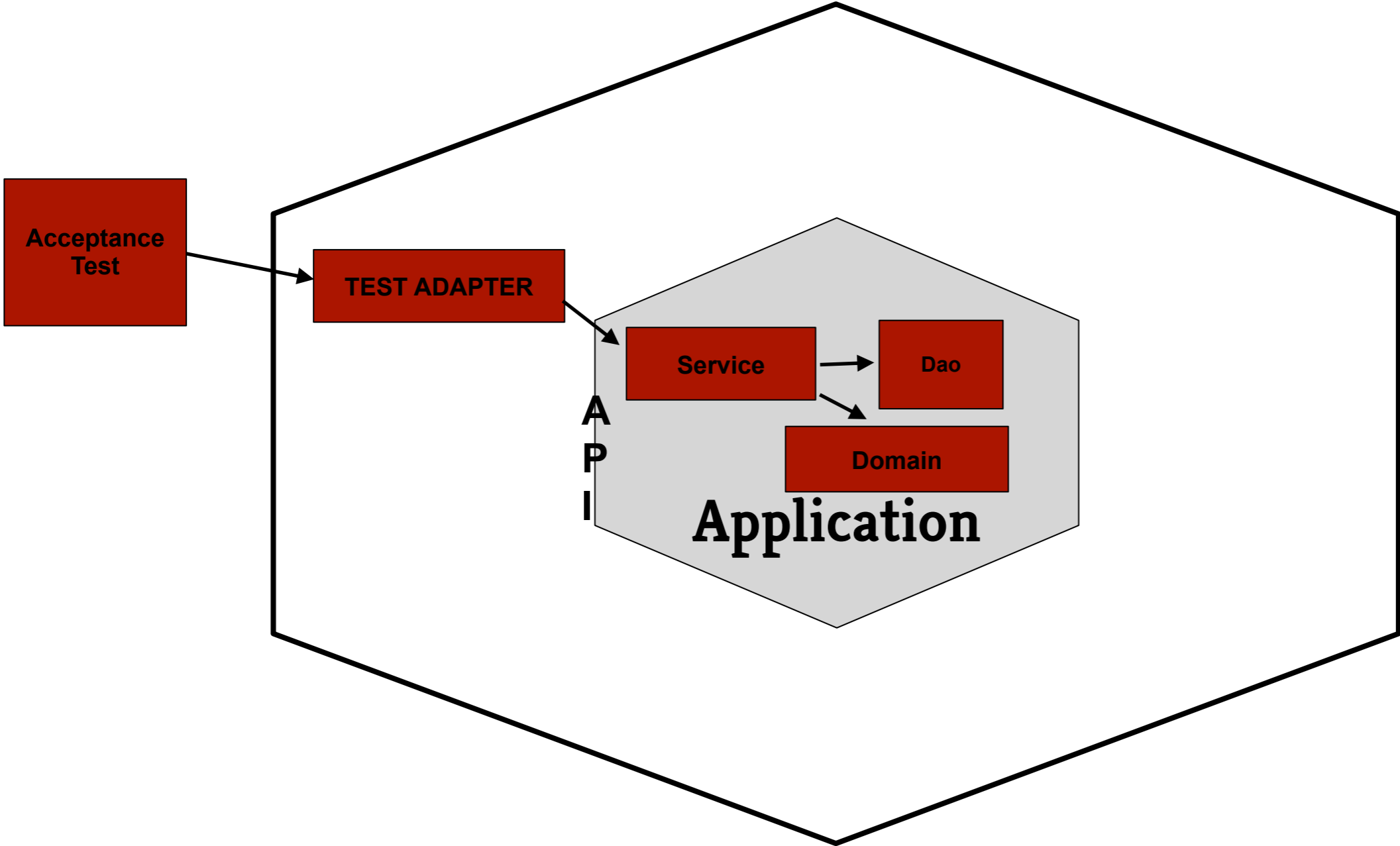
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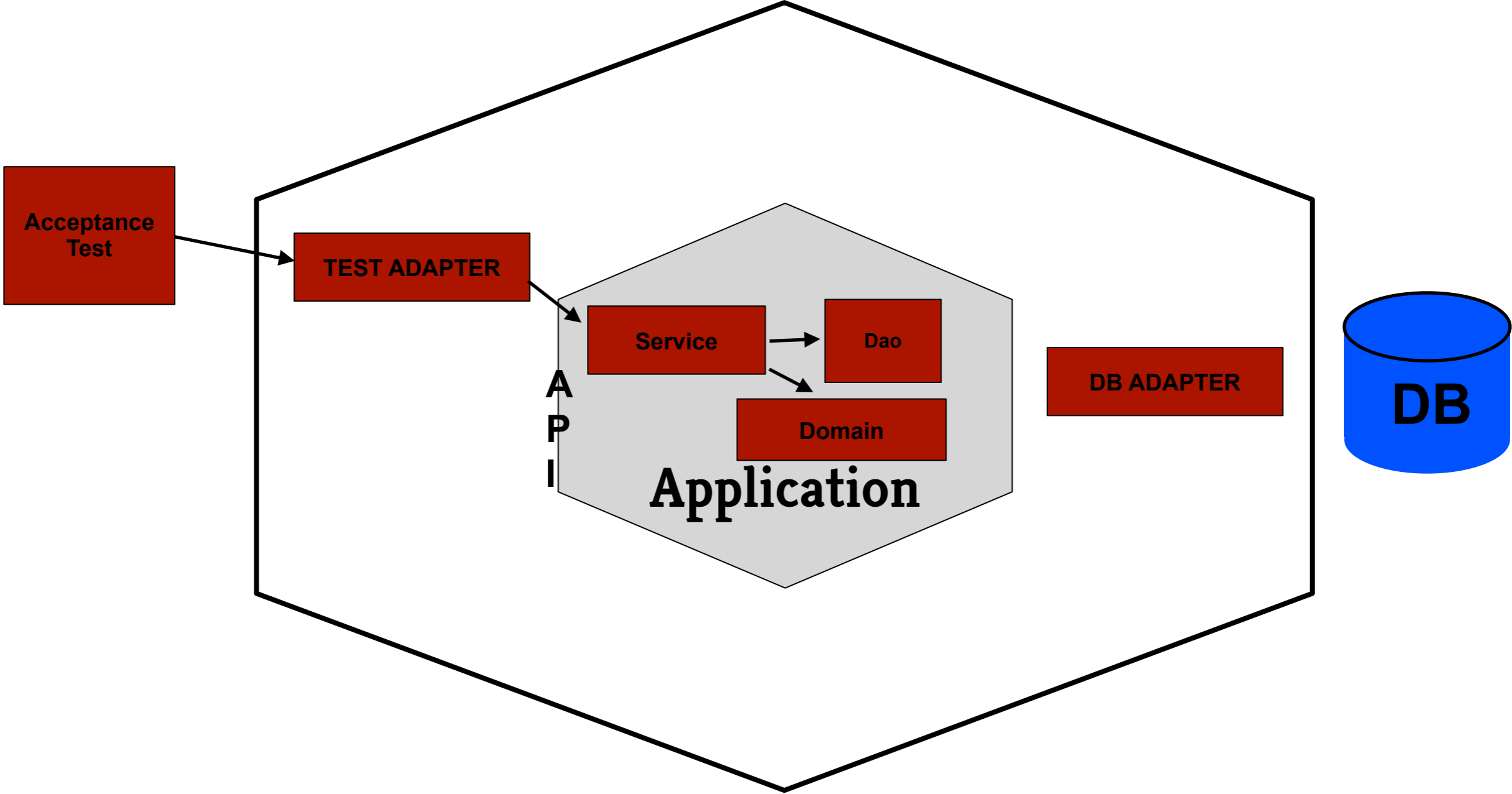
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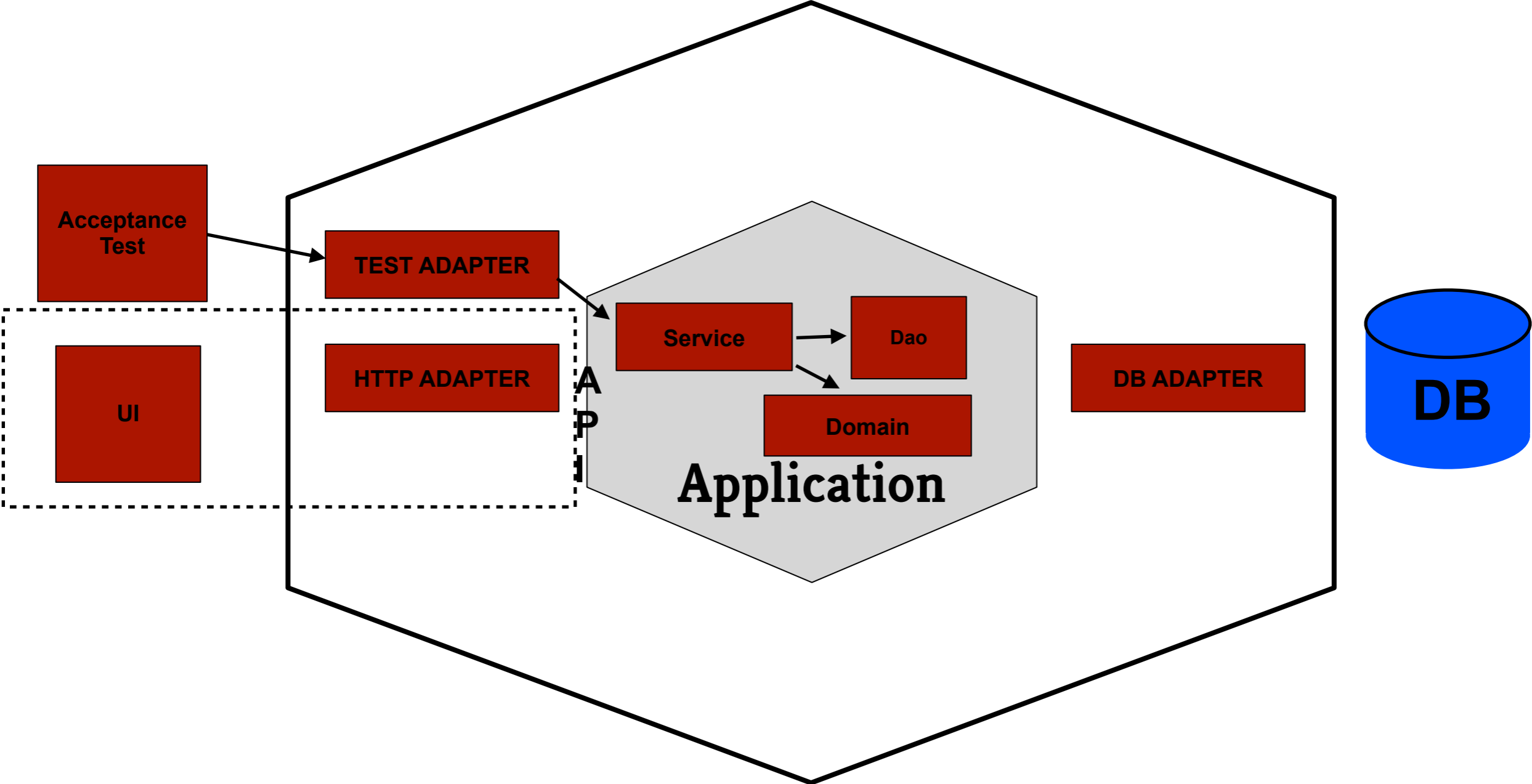
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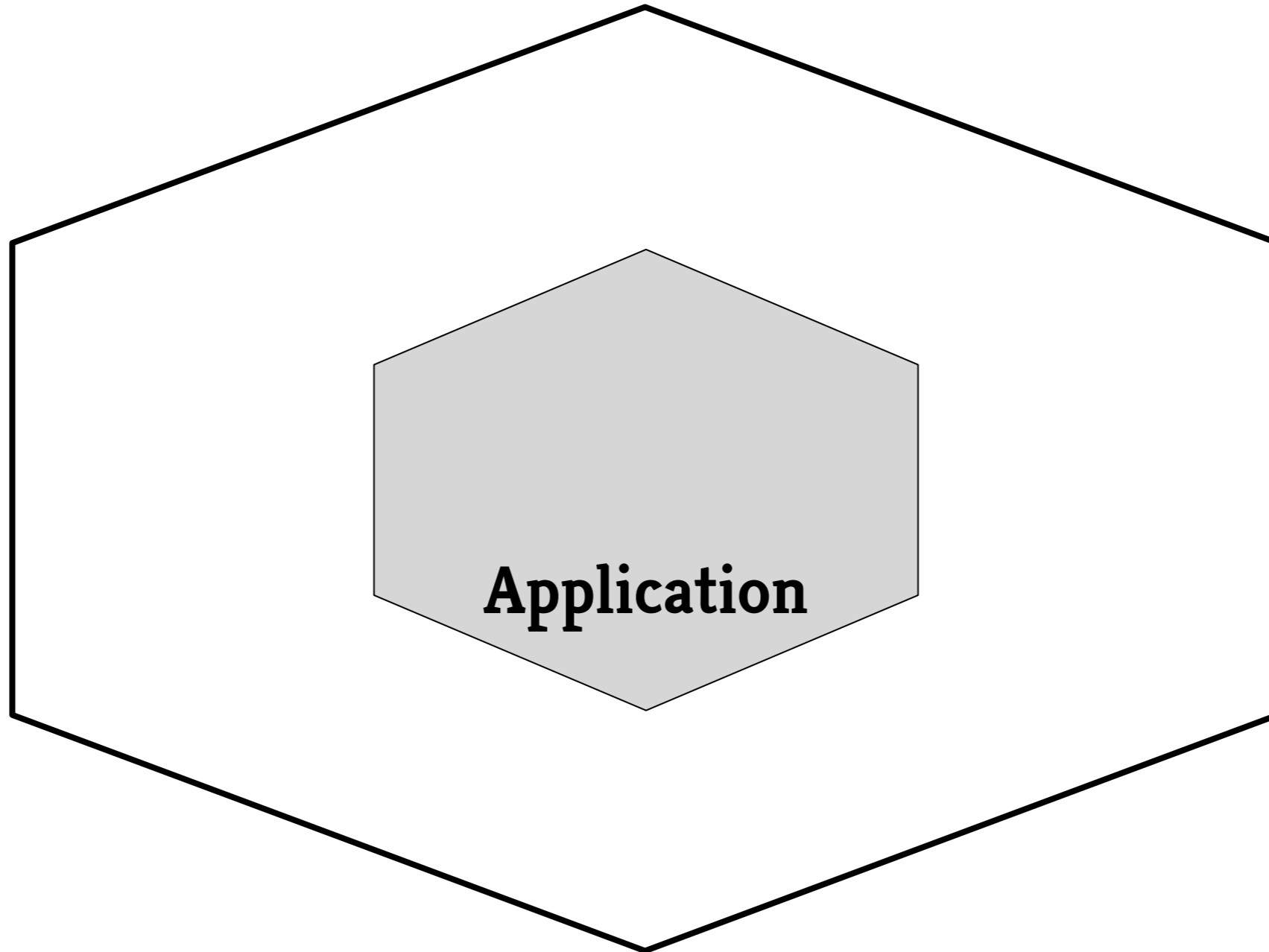


# Outside in

This will be faked →

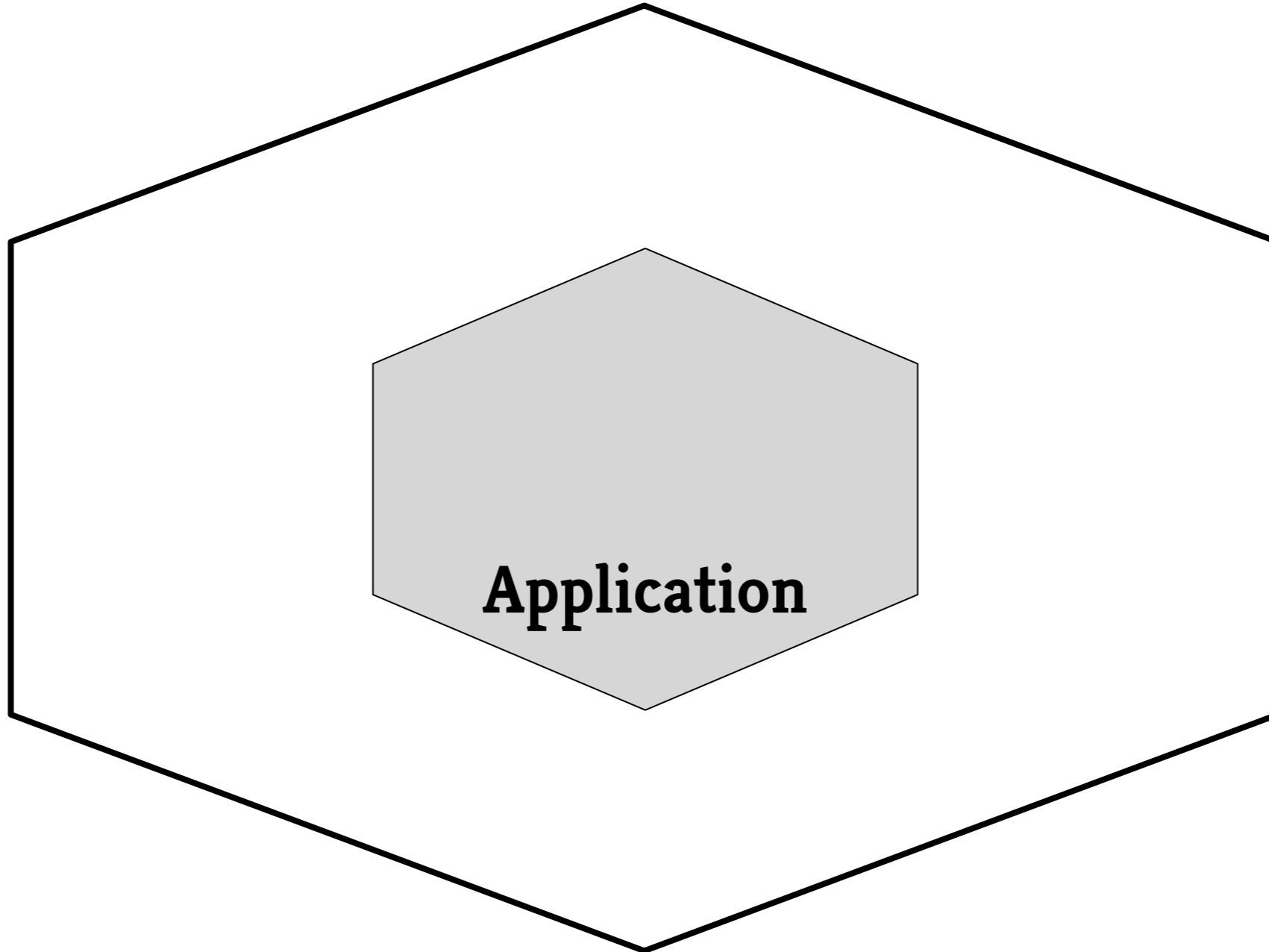


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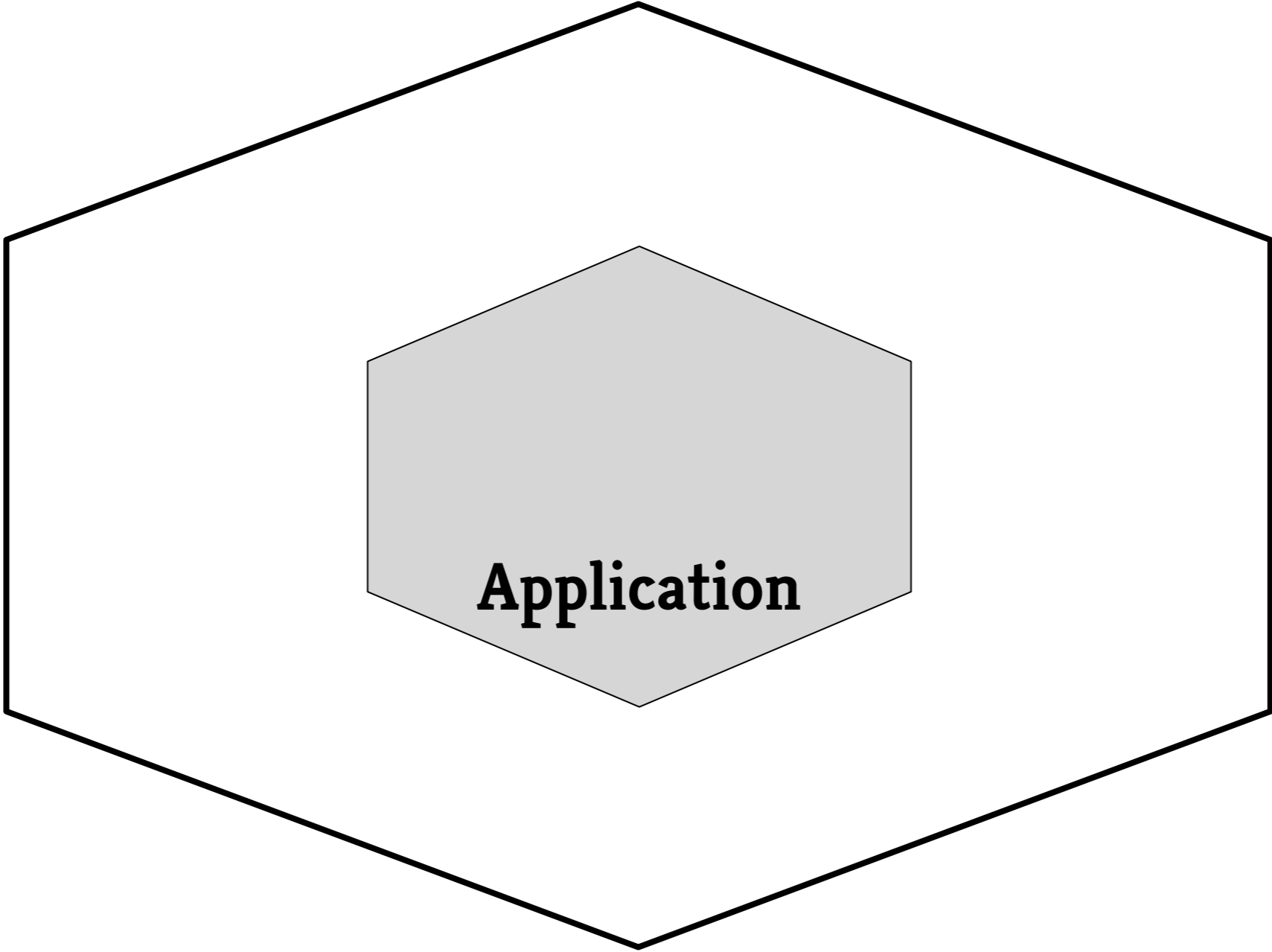
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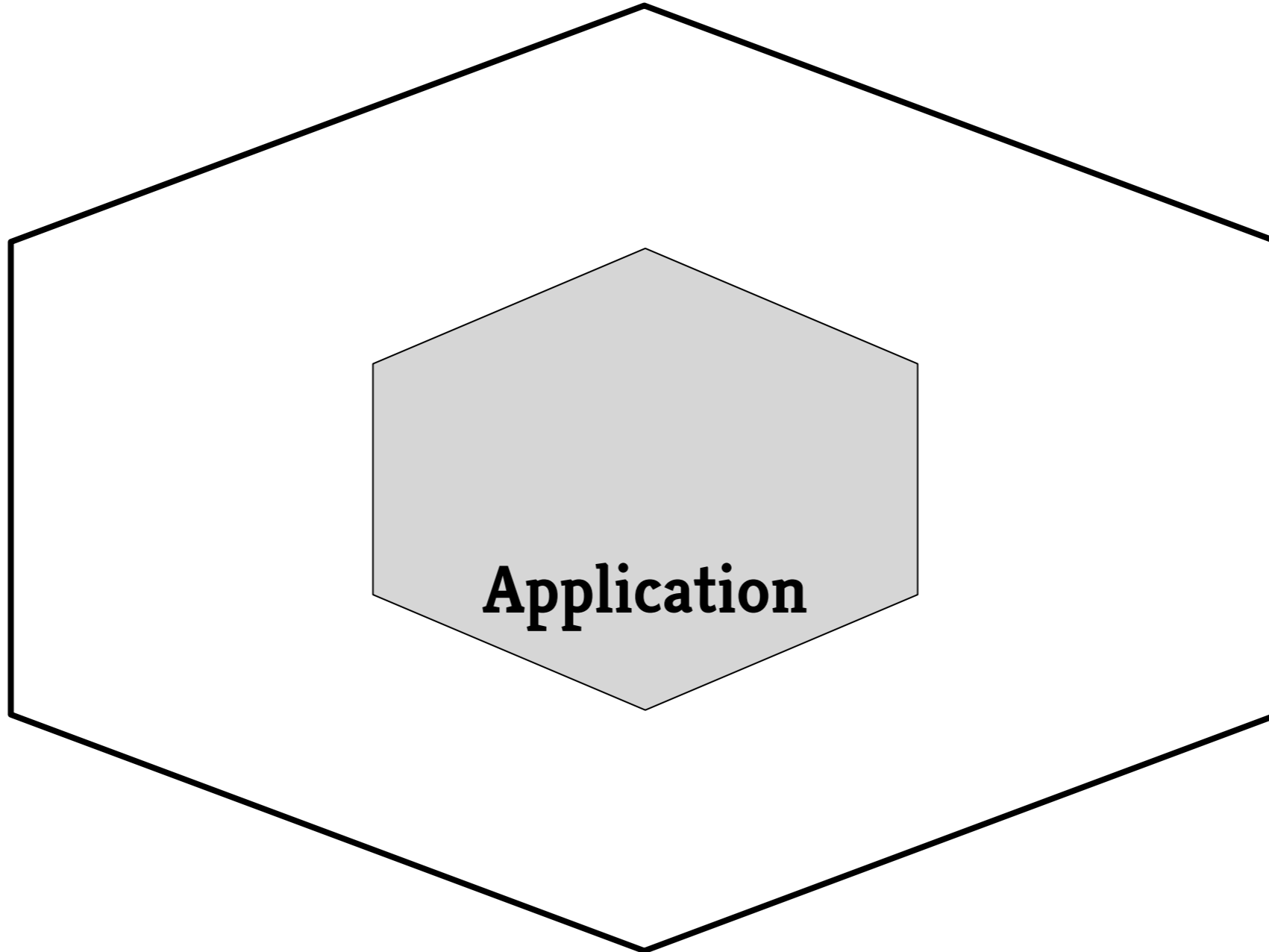
# Outside in



This will be faked →

Acceptance  
Test

# Outside in



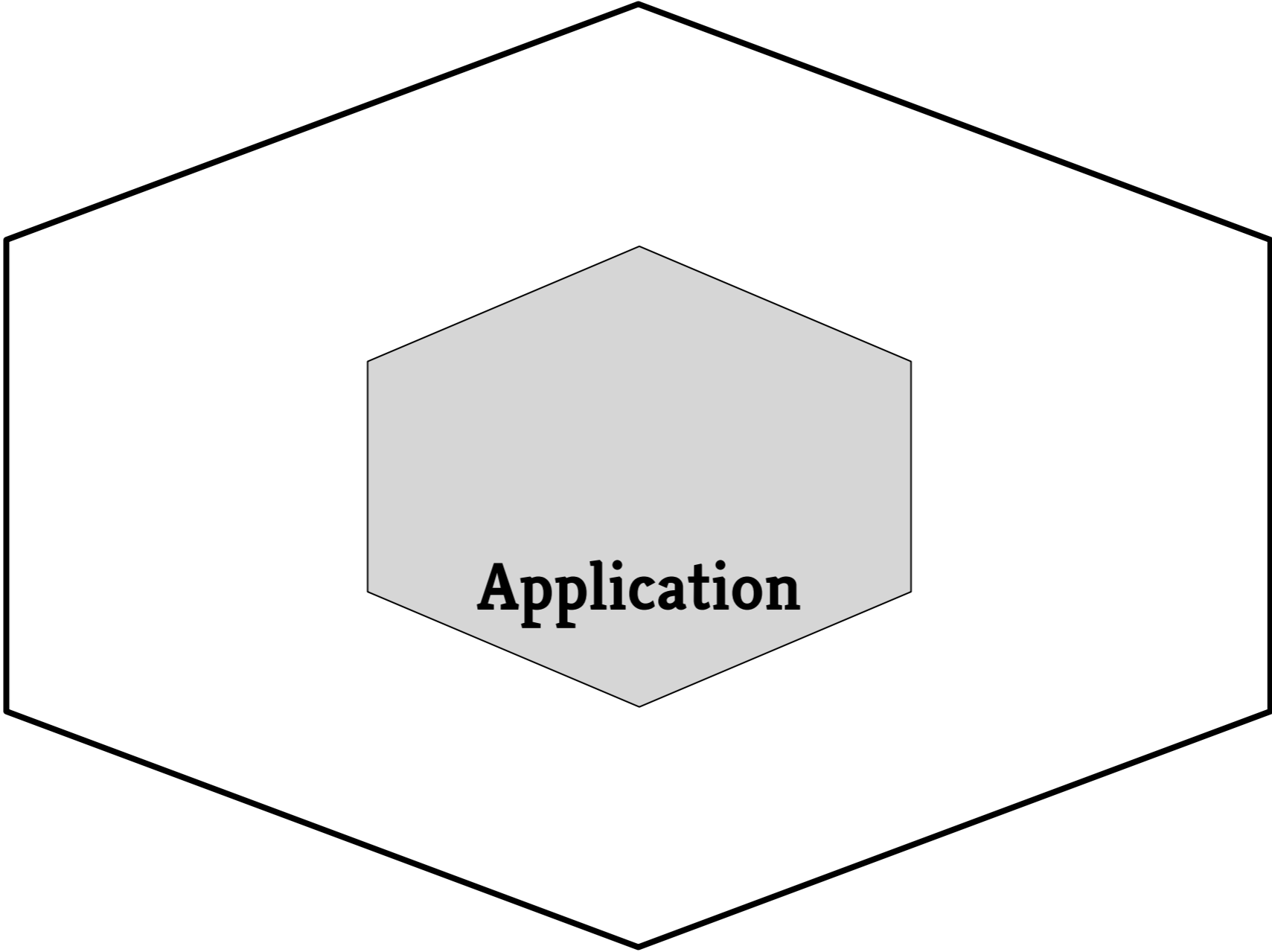
This will be faked →

# Outside in

Acceptance  
Test



UI



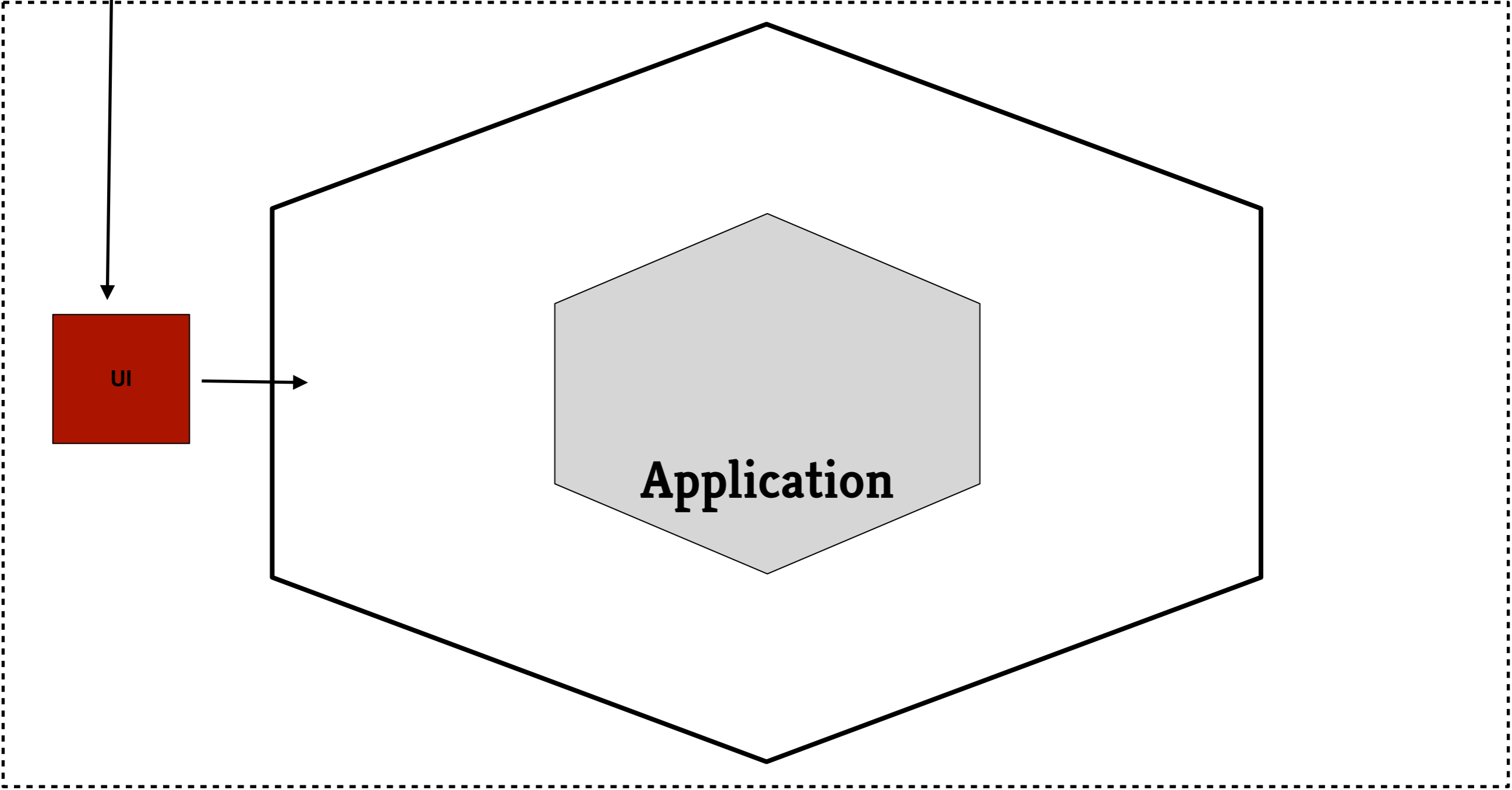
Application

This will be faked →



# Outside in

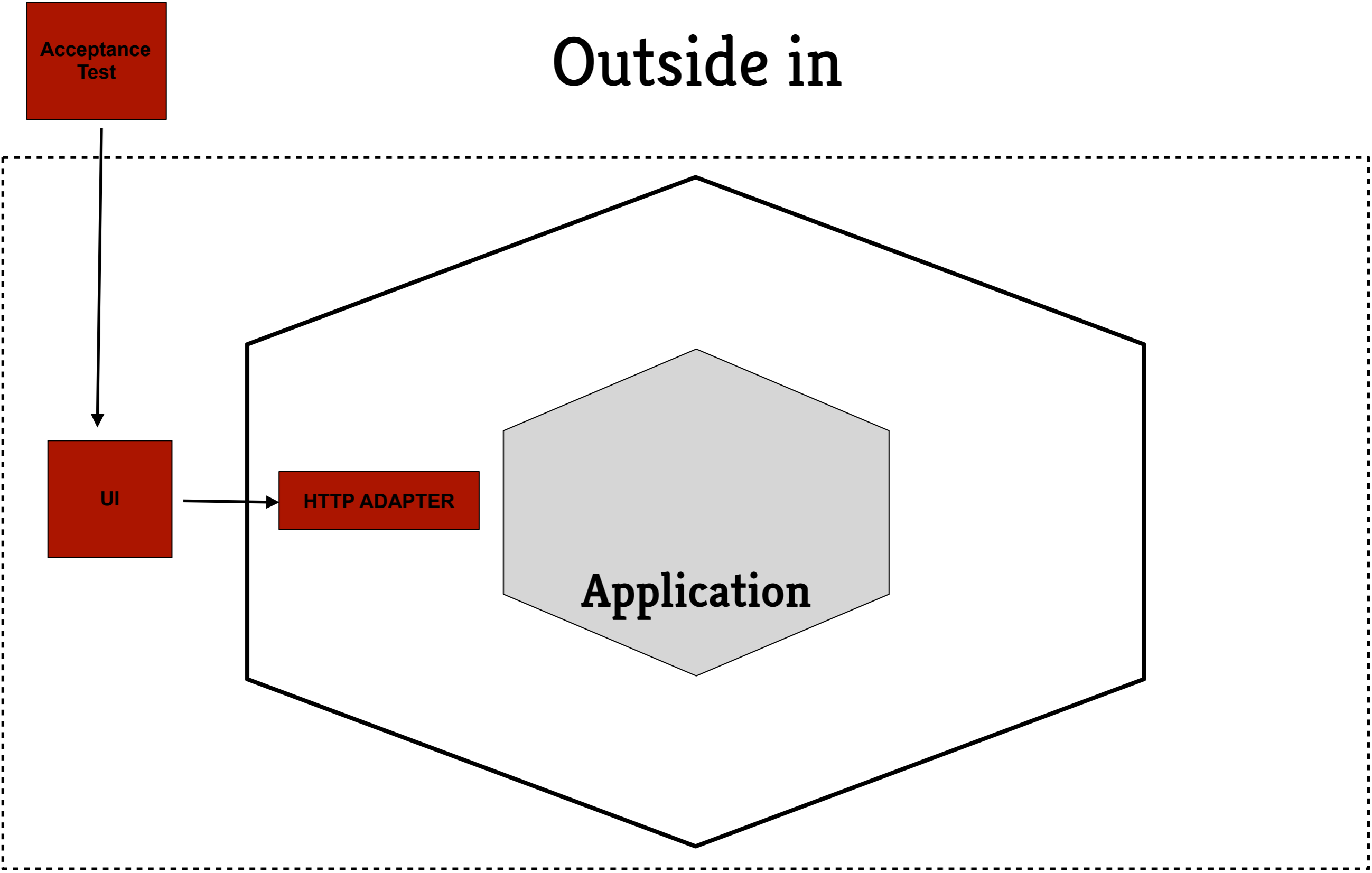
Acceptance  
Test



This will be faked →



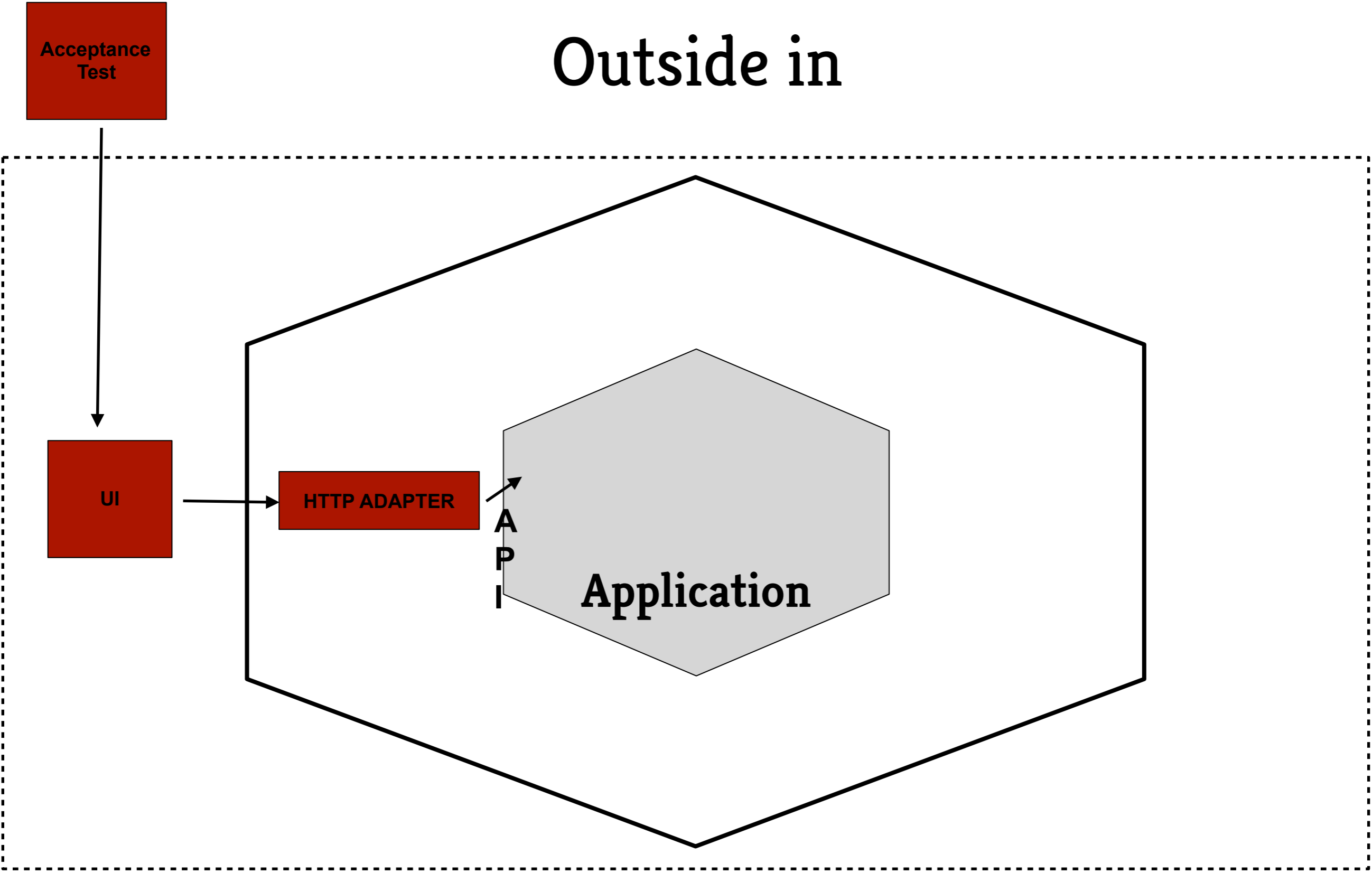
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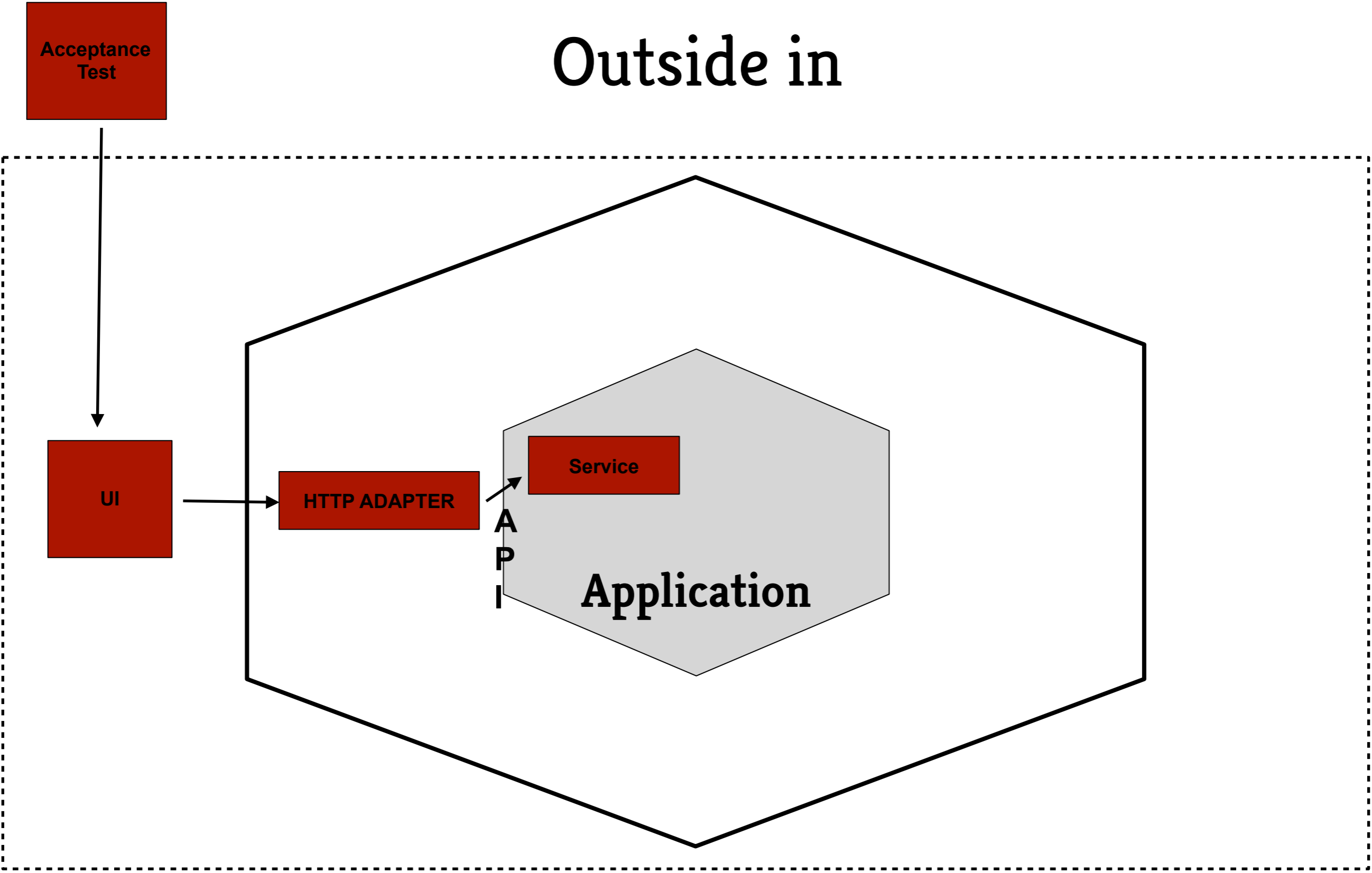
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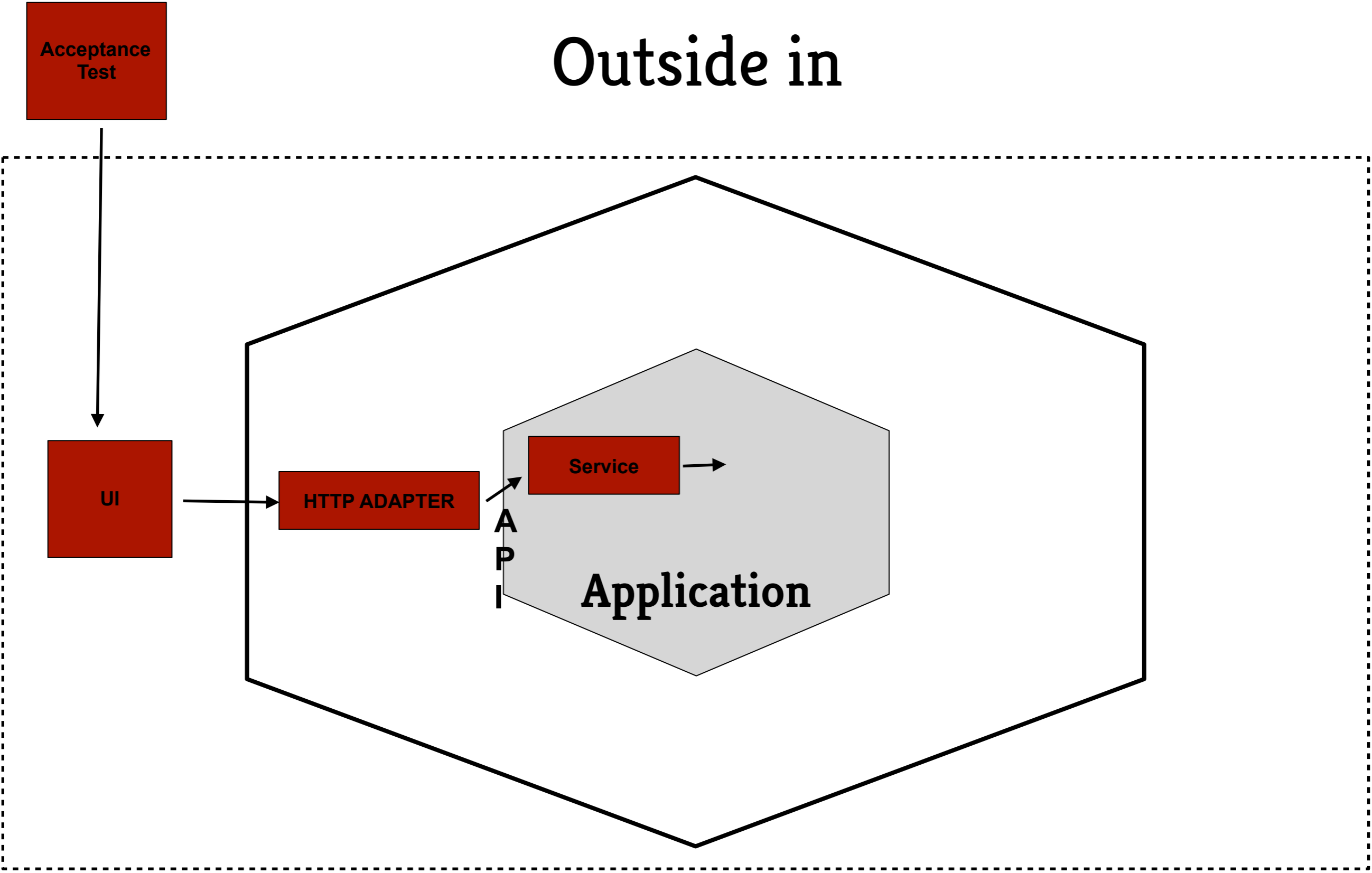
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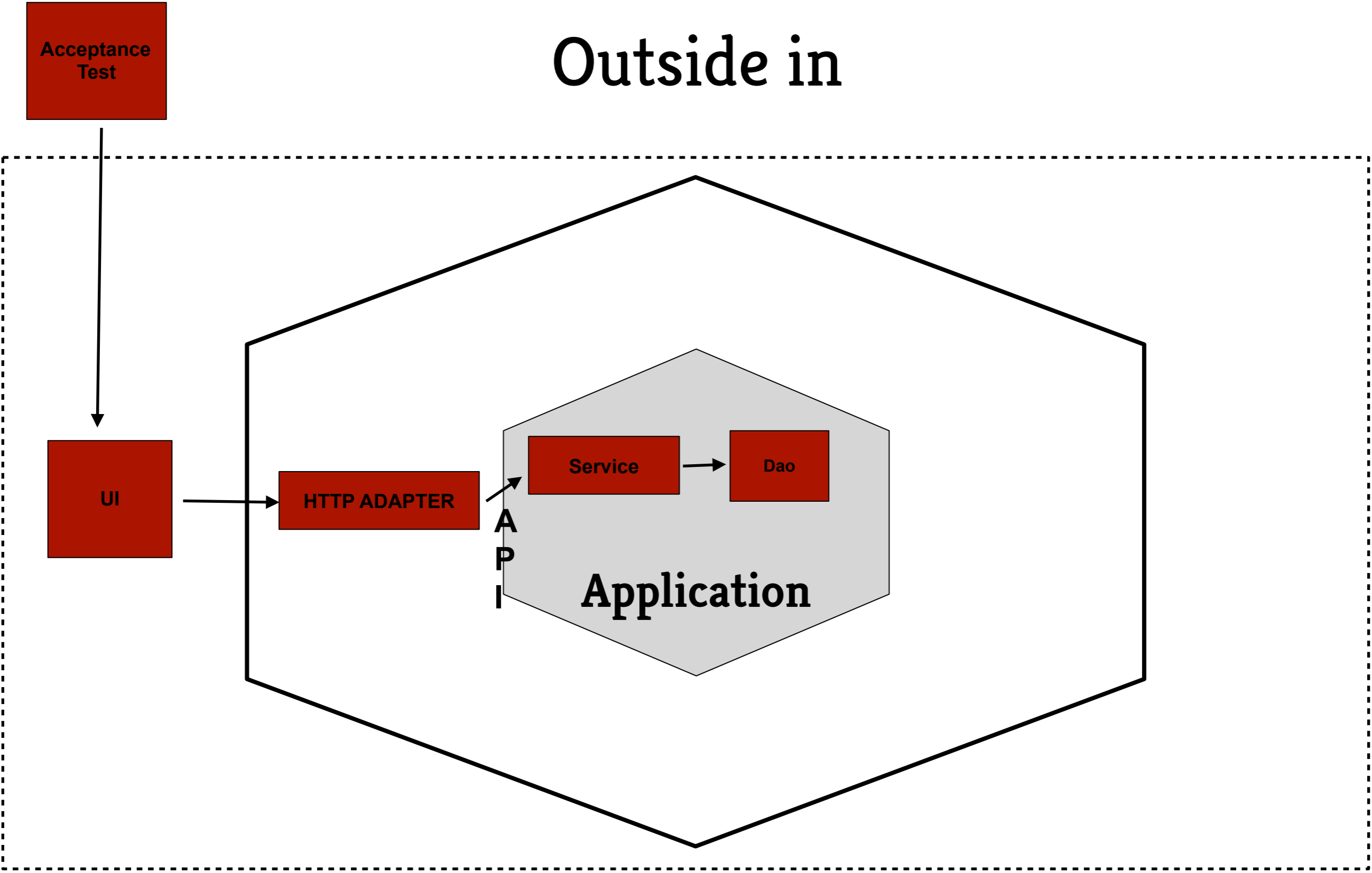
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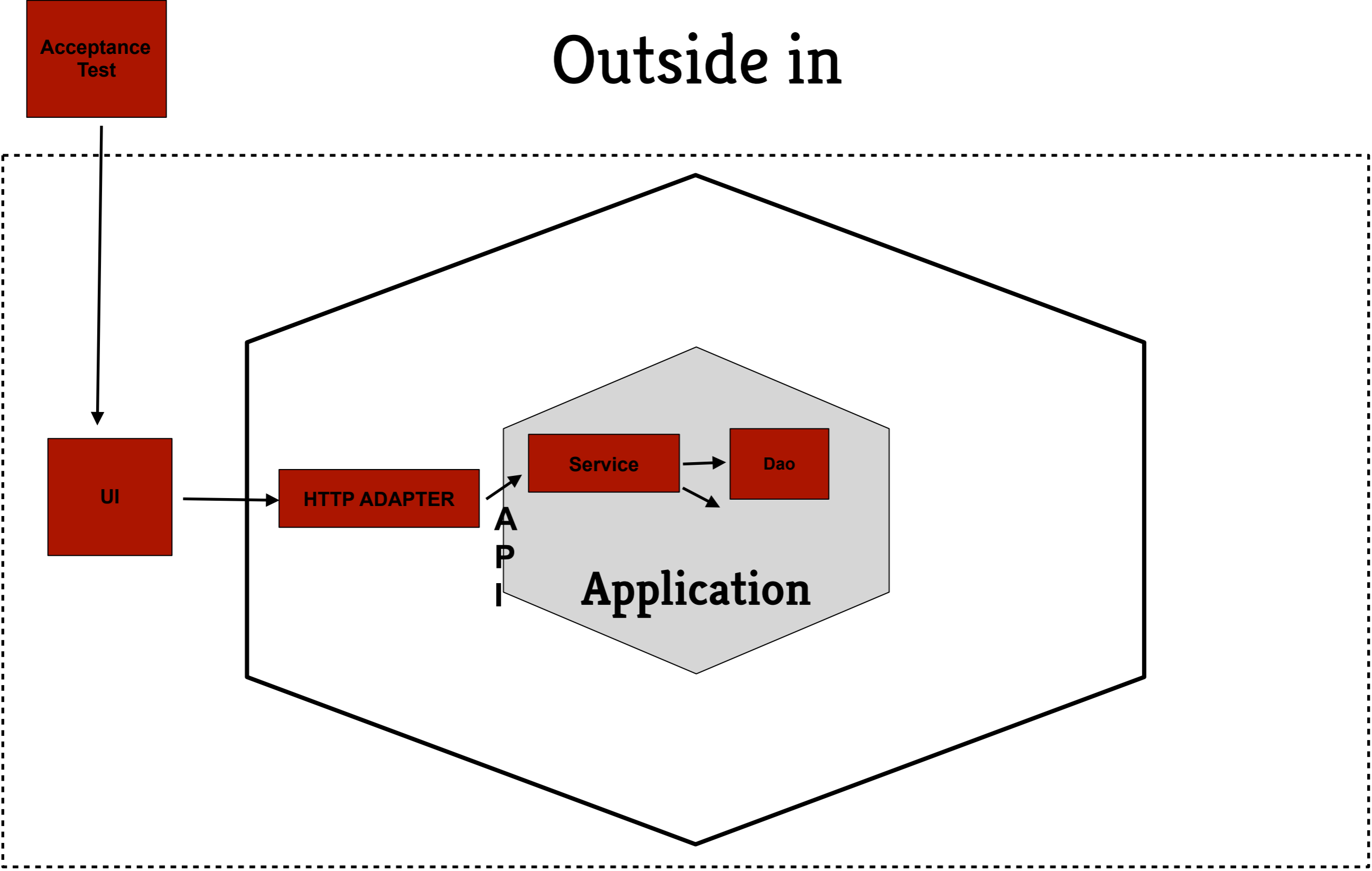
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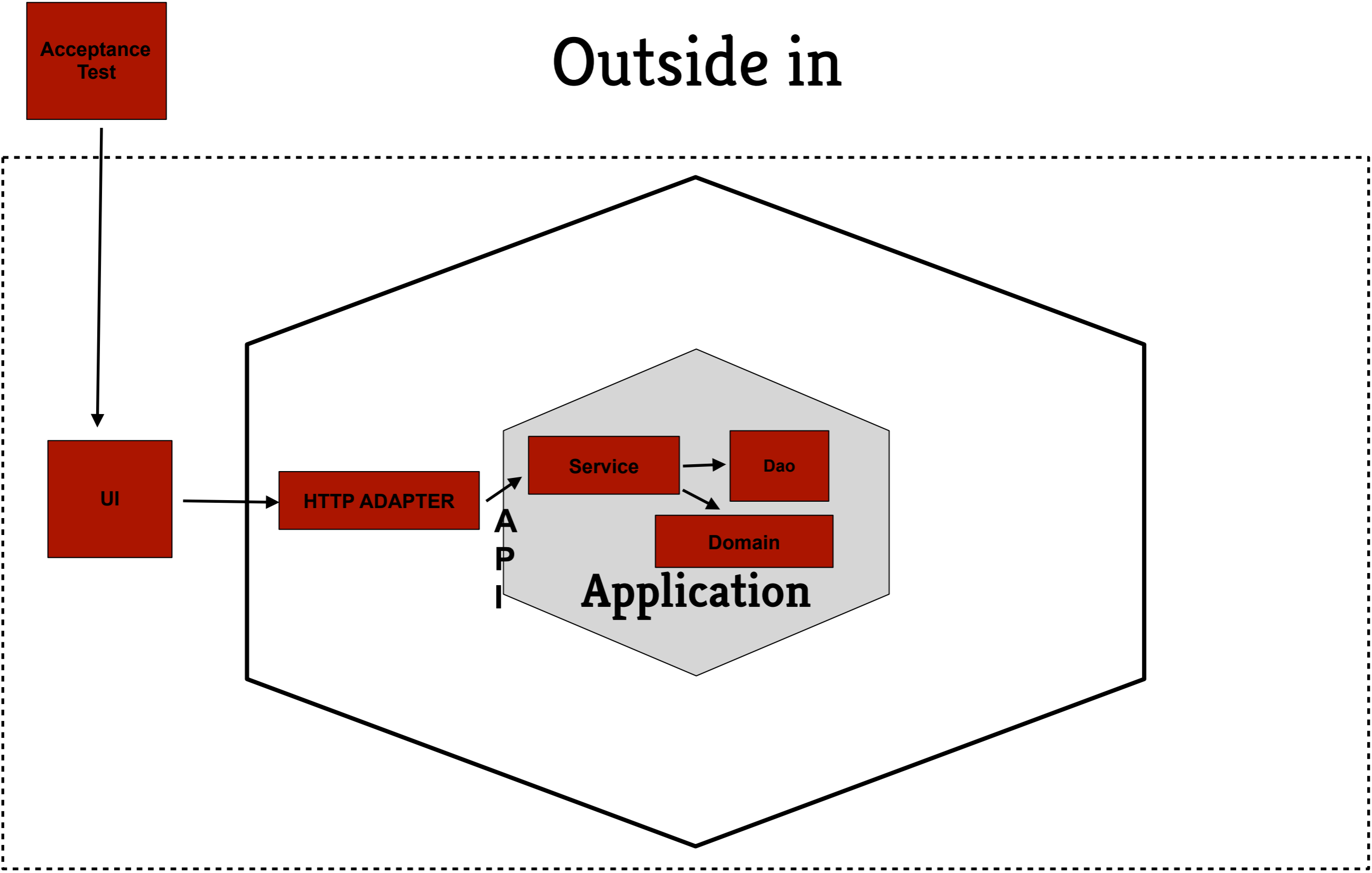
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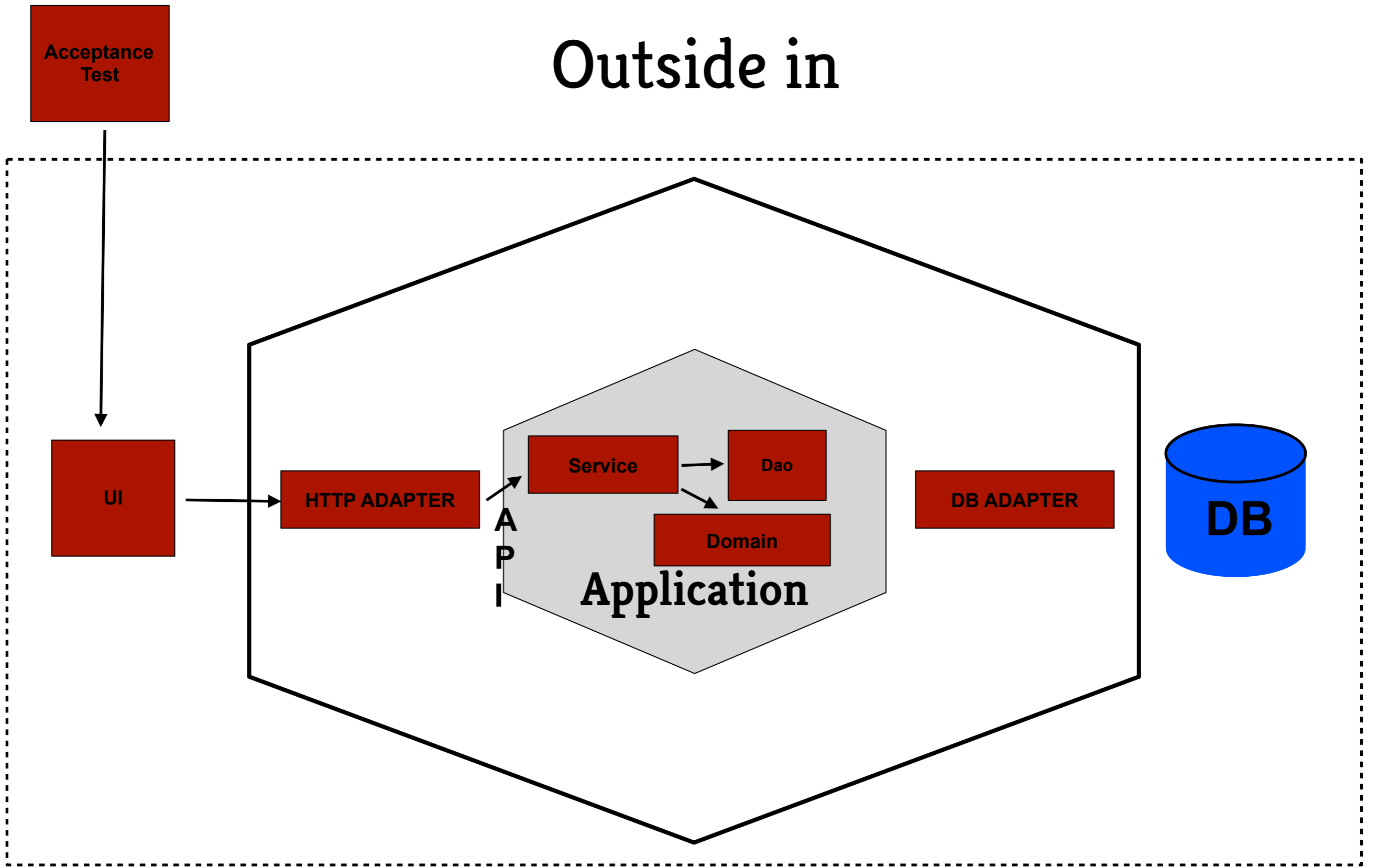
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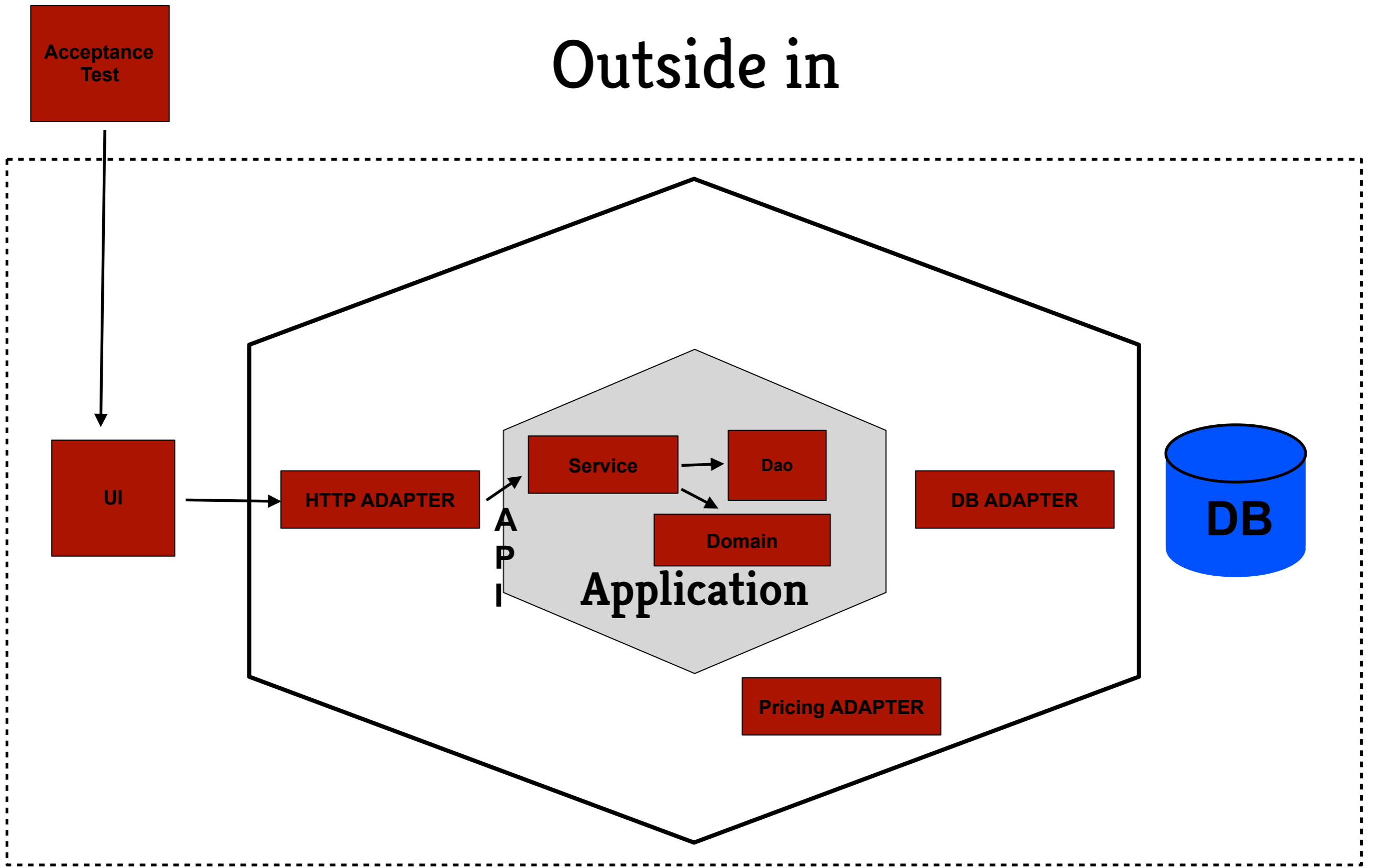


# Outside in



This will be faked →

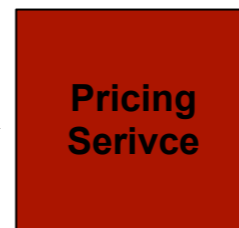
# Outside in



This will be faked



Pricing Service



# What does Uncle Bob say?

“After all, I focus on the use-cases and consider the UI to be a annoying little detail”

“Now, truth be told, I don’t use the GOOS methodology. I prefer an inside-out\* approach”

From <http://blog.8thlight.com/uncle-bob/2011/11/22/Clean-Architecture.html> - Uncle Bob

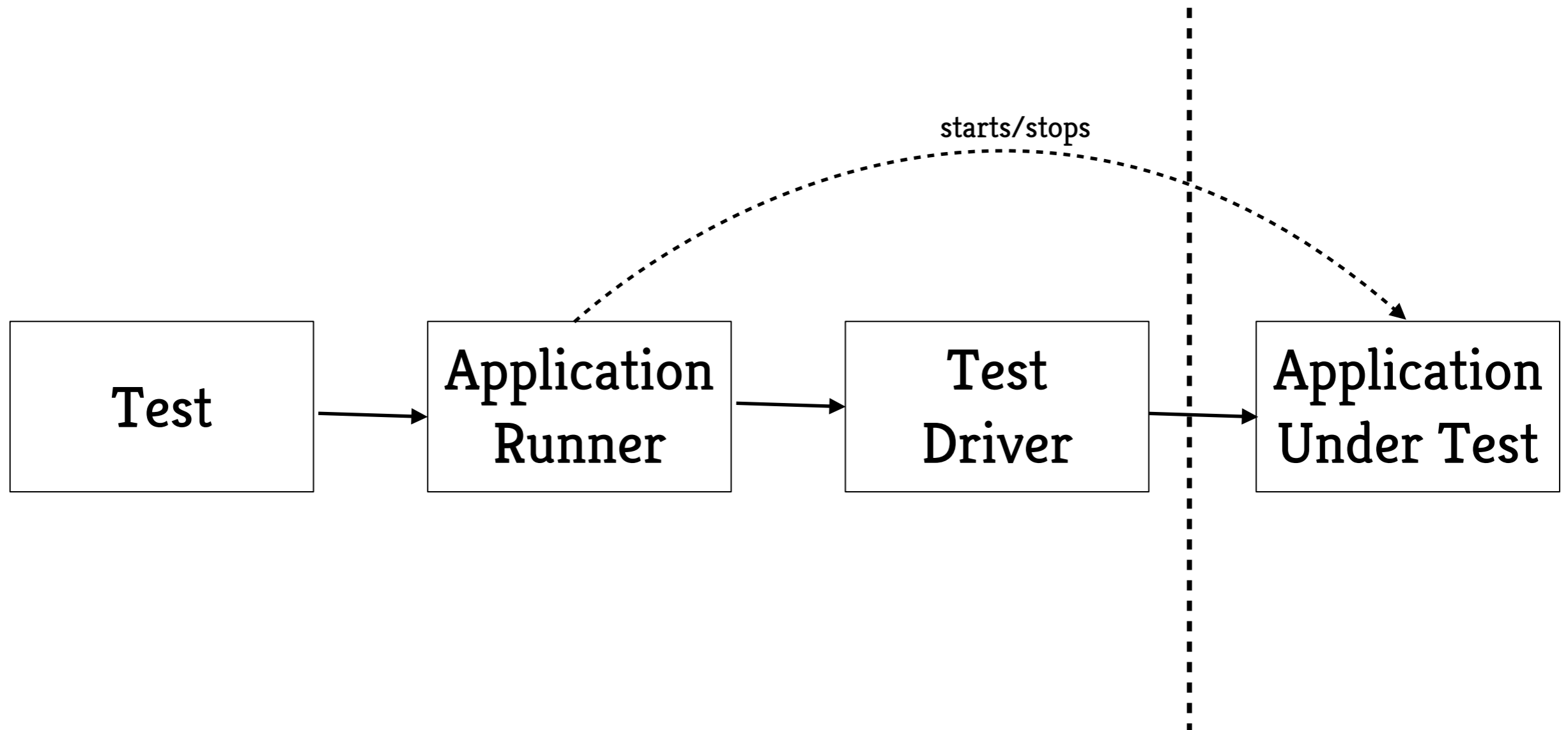
\* = Actually the **middle in** in our model

# The TDD cycle (long version)

- Know the business case
- Talk to “user”
- Create shared model
  - Do design
  - Define acceptance criteria
- Do application design
- Iterate of acceptance tests
  - Red - Green - Refactor



# GOOS - The Walking Skeleton



# GOOS - Building blocks

- **ApplicationRunner**
- **TestDriver**
- **Pollers and Probes**
- **Fakes**

# The Case - Holiday Auction

- **Vision**
  - Provide online platform for auctioning trips
- **Goals**
  - Net promotor score of 7.5
  - Get marketshare of 20% in first year

The demo source code is available here:

<https://github.com/zilverline/xpdays-2011-goos>

Have fun!

Sander & Lars