

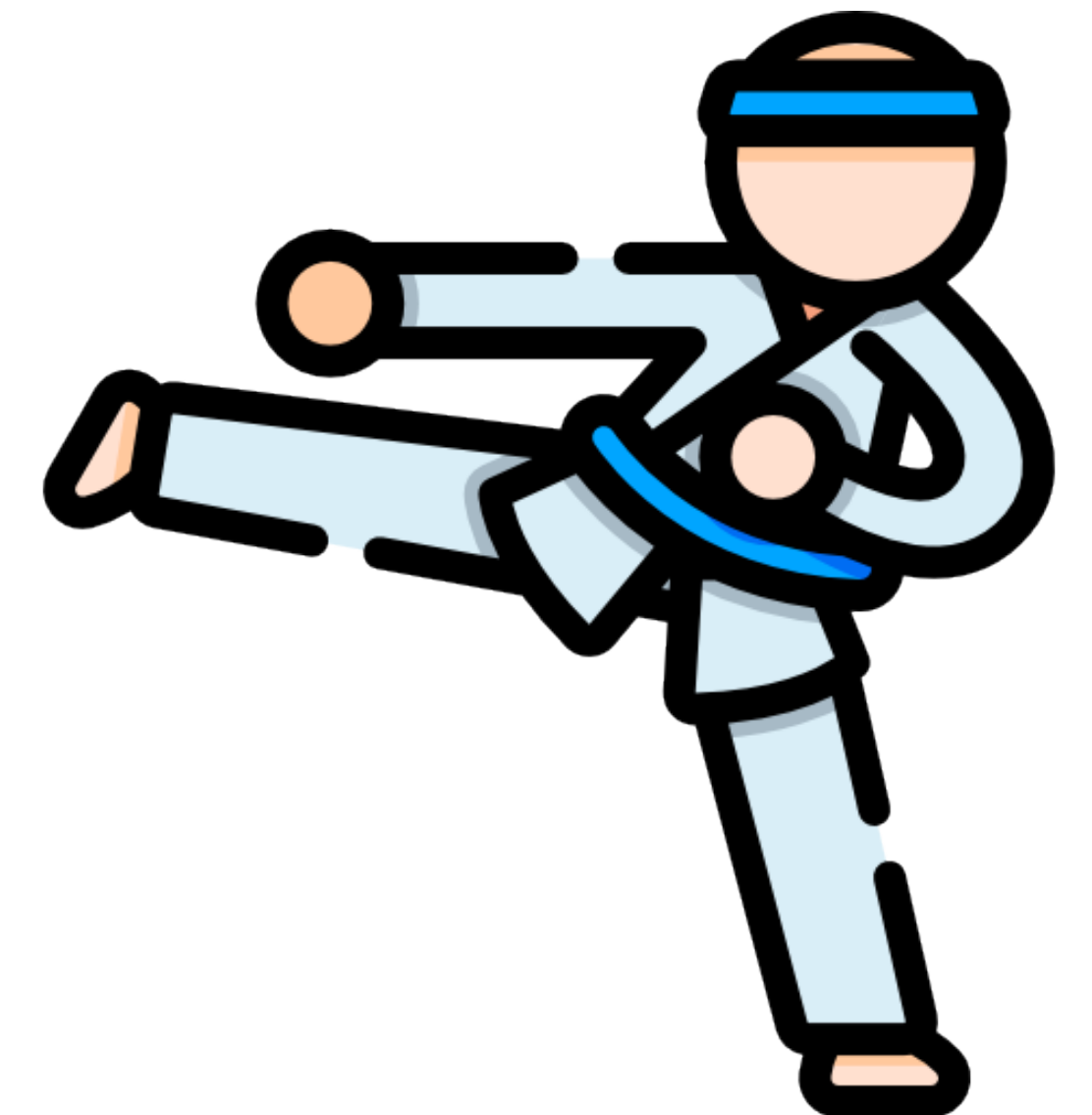
PyTER: Effective Program Repair for Python Type Errors

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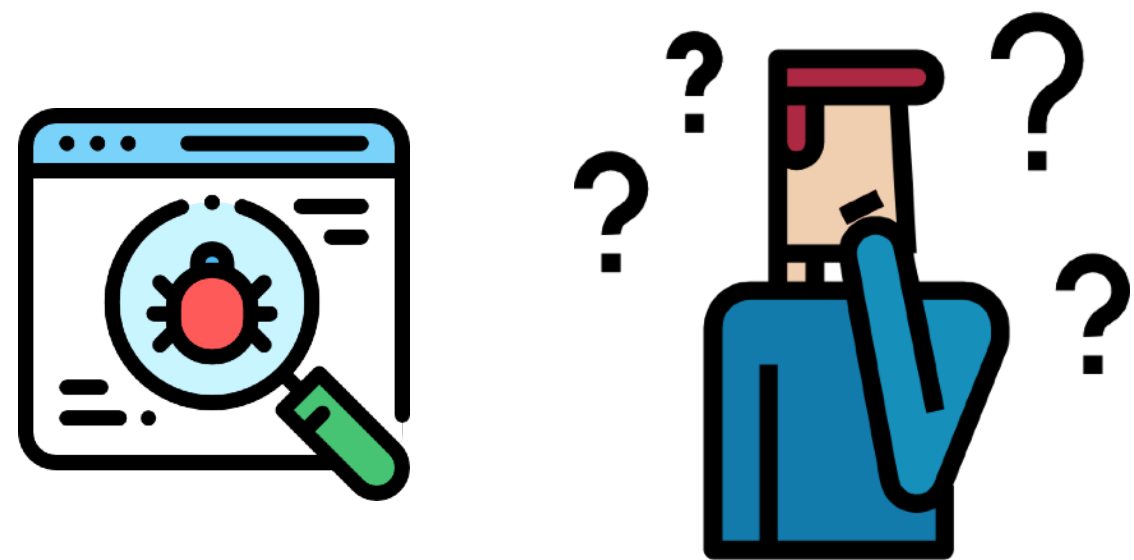
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Motivation: Type errors are important

1. What is the **most common** run-time error in Python?

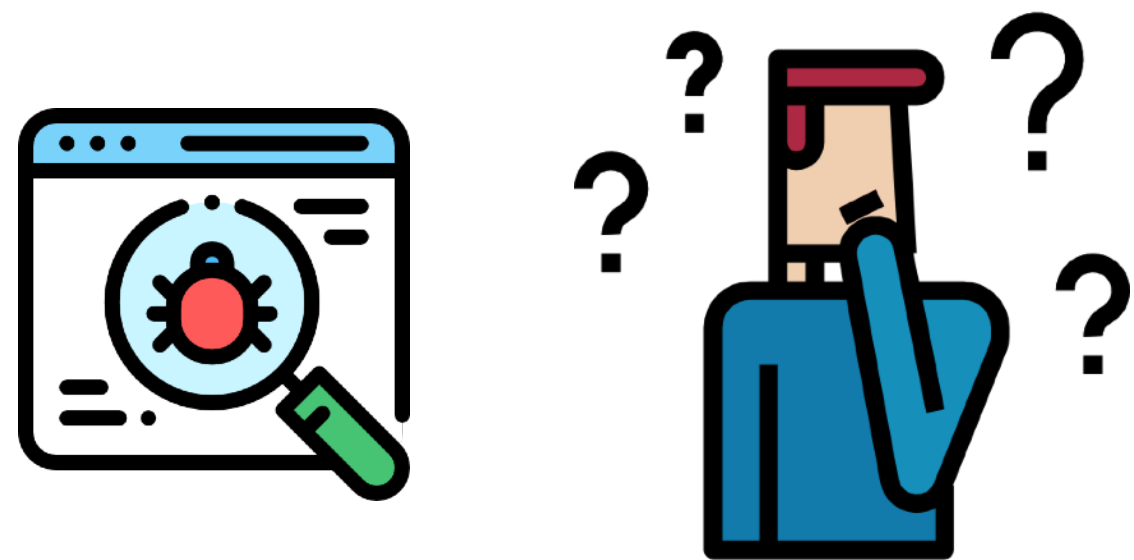


Among top 5 built-in exceptions...

	Type	Attribute	Value	Key	Import
StackOverflow	31.5%	19.4%	27.8%	8.3%	13.0%
GitHub	29.2%	19.4%	28.2%	12.9%	10.3%

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Example: Type error in real-world

Negative testcase

```
1 ret["comment"] = " ".join(  
2     [  
3         "" if not ret["comment"] else ret["comment"]  
4     ]  
5 )
```

ret["comment"] = [1,2,3] (List of int)

