**Cairo University Faculty of Computers and Artificial Intelligence**



**Software Design and Architecture**

**Software design specification document**

**2022**

**Project Team**

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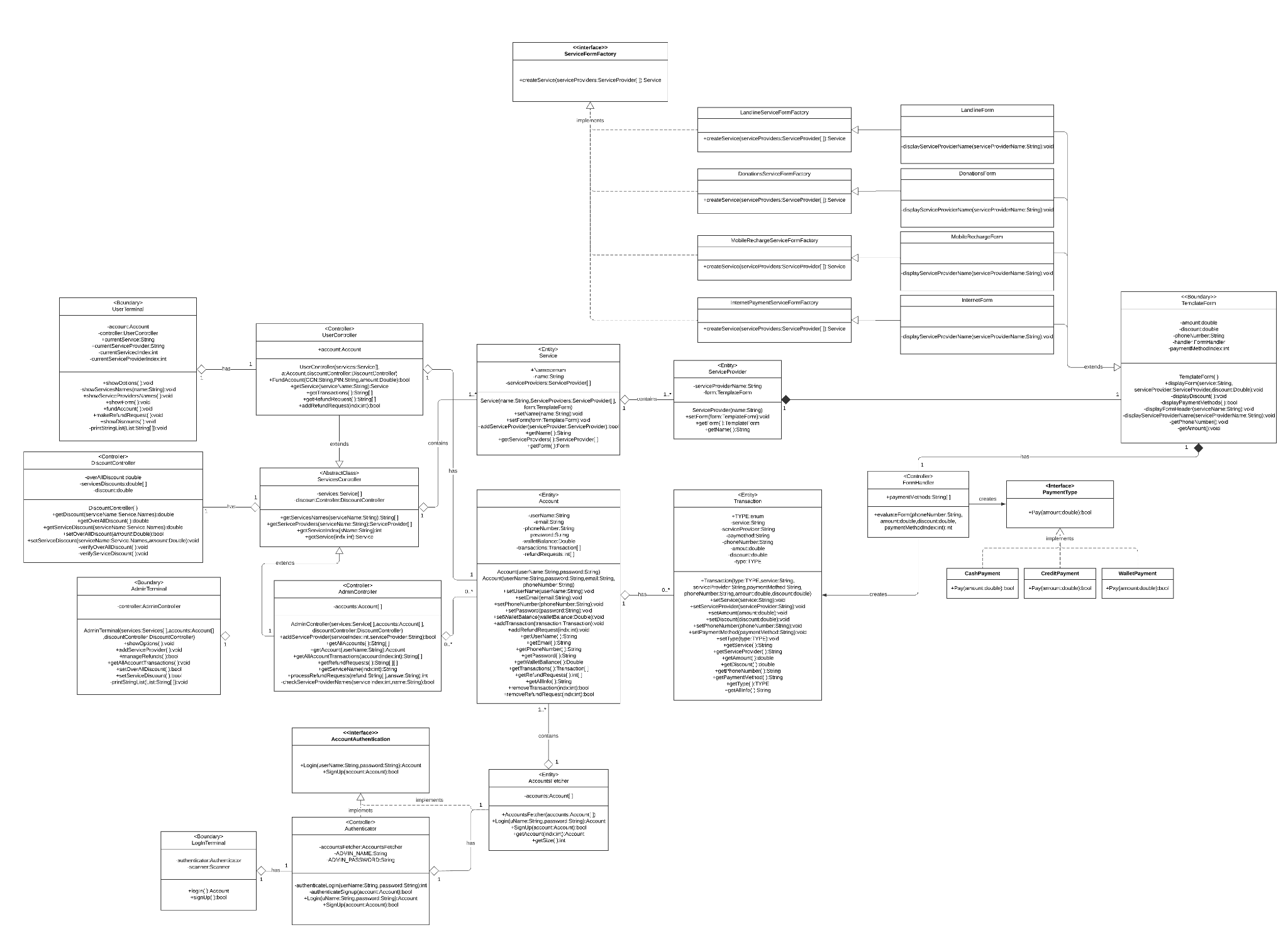
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# Class Diagram Design

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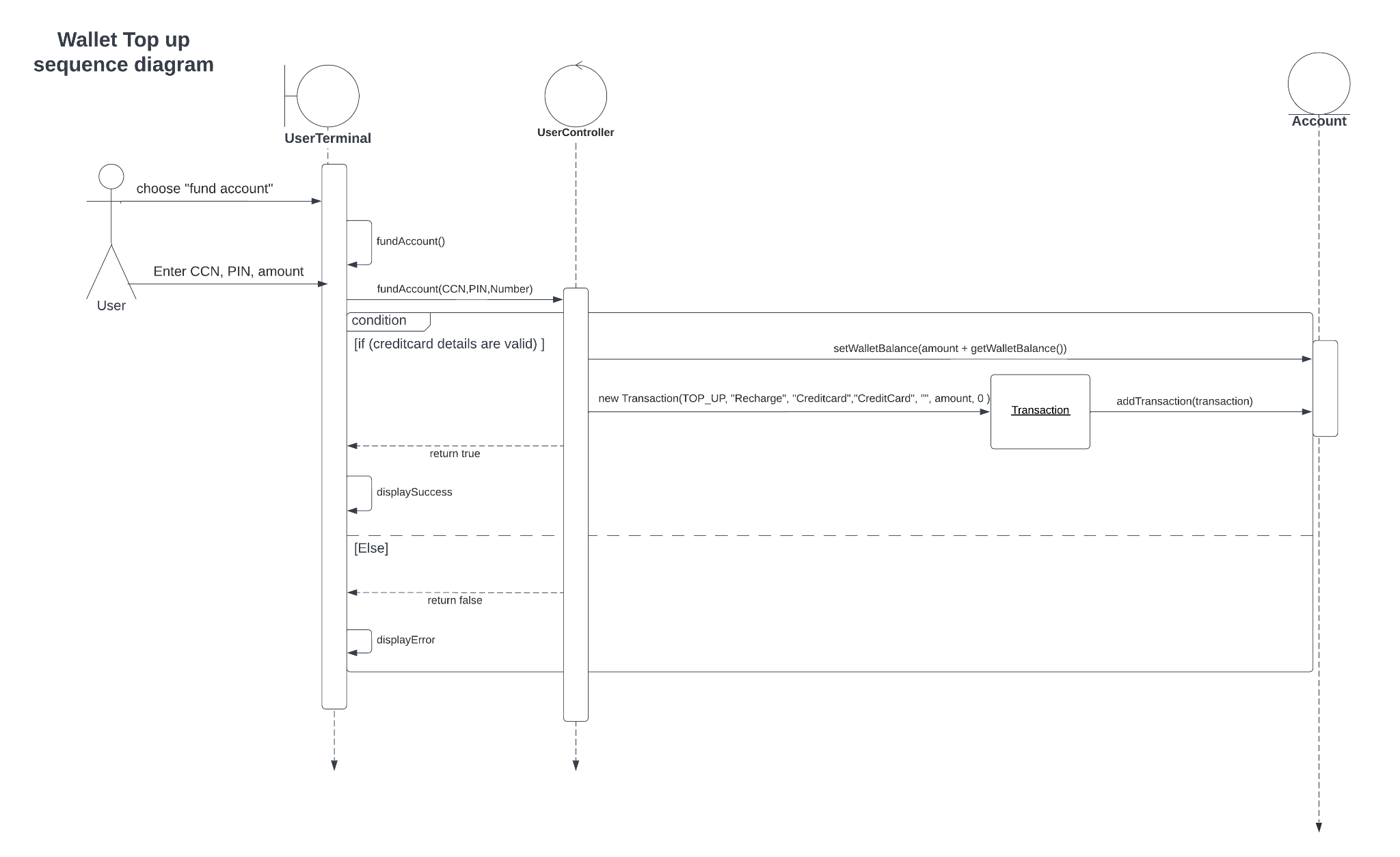
# Class Diagram Explanation

* **Strategy: used in payment methods as they all provide the same functionality “payment”  
  but with different implementations.**
* **Proxy: Authenticator class is a proxy that is used in authenticating user login/signup.**
* **Factory: used in creating multiple services each containing different implementations in terms of service providers forms**
* **Template: used in TemplateForm superclass to unify “display steps” (displayForm()) between all forms. Where the varying step (displayServiceProvider()) is implemented by the different concretions**

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# Sequence diagram design

**Wallet Top up sequence**

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# Login sequence

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# User Signup

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# Vodafone mobile recharge sequence

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# 

# Add Refund Request

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# 

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# 

# Accept refund sequence

# 

# 

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# 

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# 

# 

# Adding new service provider sequence

# 

# 

# 

# Admin view user transactions

# 

# 

# Github Repository Link

* **https://github.com/greatyassoo/EPayment**