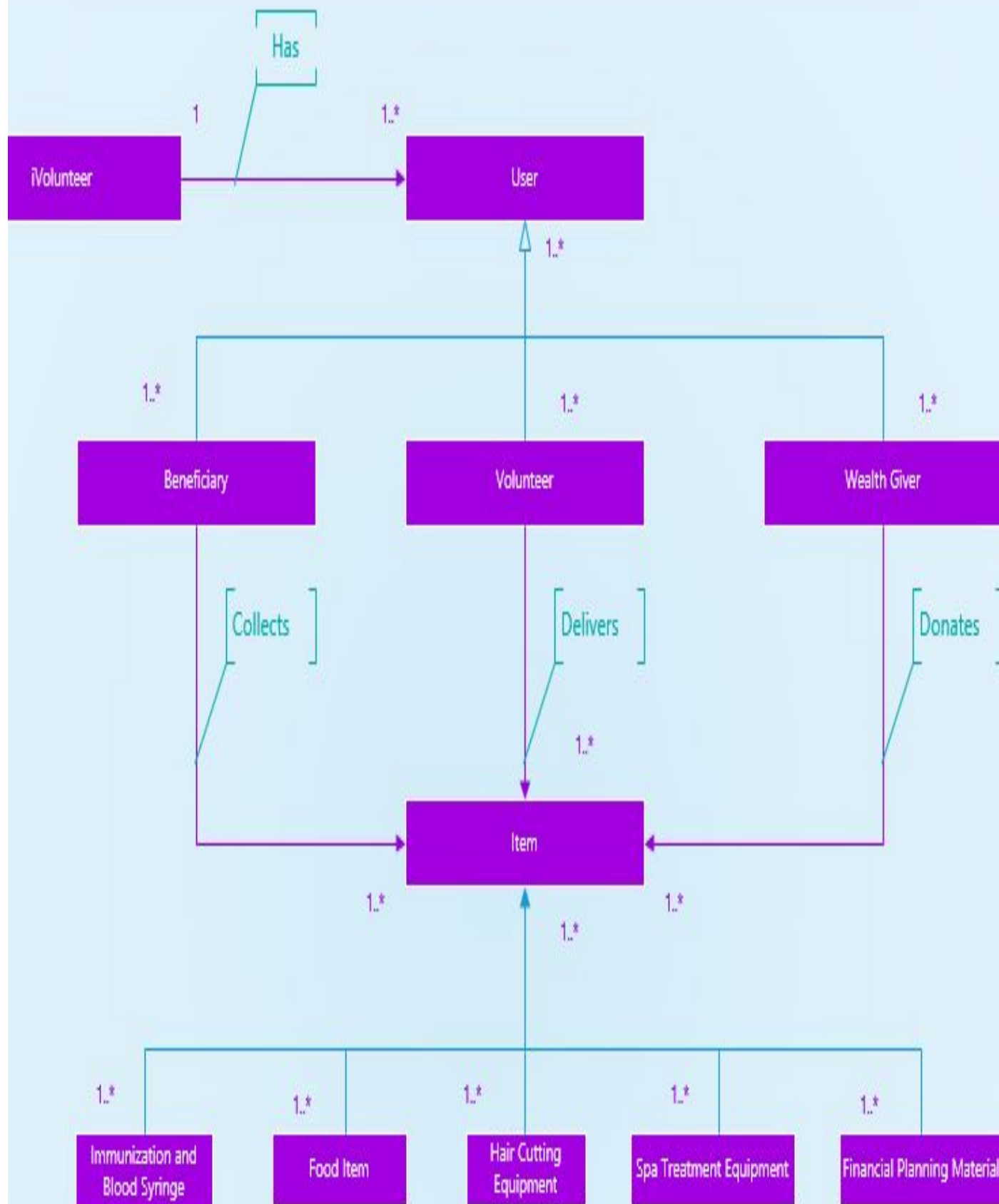




Software Design and Architecture – Phase 1: Physical Entity Class Diagram



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Use Case Name	Deliver Service <<abstract>>
Actors	Volunteer, Wealth-giver, Beneficiary
Description	This service is provided to help with connecting wealth-givers with beneficiary to make more effective benefits
Dependencies	This service is standalone and all other use cases depend on it
Preconditions	<ul style="list-style-type: none"> - There must be items available - All users must be registered into iVolunteer
Normal Flow	<ul style="list-style-type: none"> - Request for service is received from beneficiary - Wealth-givers donate items required for a service - System notifies volunteers of location and need of service - Volunteers travel and carry out the task
Alternative Flow	<p>If items are unavailable</p> <ul style="list-style-type: none"> - System will report to all people <p>If there are no volunteers</p> <ul style="list-style-type: none"> - System will report to all people and close down
Extension Points	N/A
Post-conditions	N/A
Other Requirements	N/A

Use Case Name	Deliver Food
Actors	Volunteer, Wealth-giver, Beneficiary
Description	This service is provided to help with the issue of wasting food when there are people who need it the most.
Dependencies	Implements the “Deliver Service <<abstract>>” use case.
Preconditions	<ul style="list-style-type: none"> - There must be food to give - There must be people to feed
Normal Flow	<ol style="list-style-type: none"> 1. Food is donated 2. People are informed 3. People who are hungry ask for food 4. Food is delivered
Alternative Flow	<p>If there is no food</p> <ul style="list-style-type: none"> - System sends out a notice to all people <p>If food is not delivered to people in need</p> <ul style="list-style-type: none"> - System will prioritize their next order and deliver it before others

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Extension Points	N/A
Post-conditions	After food is delivered, system is notified.
Other Requirements	N/A

Use Case Name	Provide Medical Help
Actors	Volunteer, Wealth-giver, Beneficiary
Description	This service will provide medically related care such as check ups, blood donation, as well as immunizations for people who otherwise would not be able to seek that help.
Dependencies	Extends Use Case "Take Blood" Extends Use Case "Give Immunization" Implements "Deliver Service <<abstract>>"
Preconditions	<ul style="list-style-type: none">- The beneficiary must desire to get an immunization- The wealth-giver must desire to receive blood- A medically trained volunteer must be on call to administer immunizations, or give blood, or process a check up
Normal Flow	<ol style="list-style-type: none">1. Beneficiary comes into the clinic for a check up2. Volunteering medical aid checks the person through tests3. Report is given to the beneficiary
Alternative Flow	-If the patient does not desire a type of medical service (i.e, to take blood) <ol style="list-style-type: none">1. The system will notify the volunteer
Extension Points	EP1: Give Blood EP2: Give Immunization
Post-conditions	According to the report the beneficiary receives, further actions can be taken if necessary.
Other Requirements	N/A

Use Case Name	Give Blood
Actors	Volunteer, Wealth-giver, Beneficiary
Description	This service will provide donated blood to people who have been deemed sick and in need.

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Dependencies	Extension of Use Case “Provide Medical Help”
Preconditions	<ul style="list-style-type: none"> - The beneficiary must be seen to need blood - The wealth-giver must have clean blood to give - A medically trained volunteer must be on call to process the blood donations and also to provide blood for in need patients
Normal Flow	<ol style="list-style-type: none"> 1. Wealth-giver donates clean blood 2. Patient is administered as “Needs blood” 3. Patient is given blood
Alternative Flow	<p>If no Blood is available</p> <ul style="list-style-type: none"> - Beneficiary must wait till blood is accessible <p>If beneficiary denies blood</p> <ul style="list-style-type: none"> - Authorities are informed
Extension Points	N/A
Post-conditions	Person is clear to leave clinic after receiving or donating blood
Other Requirements	N/A

Use Case Name	Give Immunization
Actors	Volunteer, Wealth-giver, Beneficiary
Description	This service will provide sick people with the needed/recommended immunizations.
Dependencies	Extension of Use Case “Provide Medical Help”
Preconditions	<ul style="list-style-type: none"> - The beneficiary must be seen to need the immunization(s) - A medically trained volunteer must be on call to process the immunization(s)
Normal Flow	<ol style="list-style-type: none"> 1. Patient is administered as “Needs certain immunization(s)” 2. Patient is given needed immunization(s)
Alternative Flow	<p>If beneficiary denies immunization</p> <ul style="list-style-type: none"> - Inform person of health risk which could result due to negligence
Extension Points	N/A
Post-conditions	Person is clear to leave clinic after receiving immunization and has no further side- effects.
Other Requirements	N/A

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Use Case Name	Provide Babysitting
Actors	Volunteer, Wealth-giver, Beneficiary
Description	For parent and guardians who need their child(ren) taken care off, volunteers will be on hand to look after them (feed, put to bed, etc.)
Dependencies	Implements "Deliver Service <<abstract>>"
Preconditions	- Beneficiary must have a child
Normal Flow	<ol style="list-style-type: none"> 1. Beneficiary ask for help with taking care of child 2. Volunteers are specifically chosen according to the child they will be taking care off 3. Rules between beneficiary-volunteer-child are established 4. Child is taken care off accordingly
Alternative Flow	<p>Child is misbehaving</p> <ul style="list-style-type: none"> - Parent/guardian is reported immediately and child may be withdrawn from volunteer according to severity of their actions <p>Breach of rules</p> <ul style="list-style-type: none"> - All parties are informed - Actions are taken accordingly <p>Child is withdrawn from the program</p> <ul style="list-style-type: none"> - System is reported too
Extension Points	N/A
Post-conditions	The beneficiary (guardian of child) will arrive to pick up their child or will arrive home - which will be queue for volunteer to leave.
Other Requirements	N/A

Use Case Name	Provide Hygiene Care
Actors	Volunteer, Wealth-giver, Beneficiary
Description	This use case is designed to aid beneficiaries in maintaining proper hygienic practices.
Dependencies	Extends "Give Haircut" Implements "Deliver Service <<abstract>>"
Preconditions	<ul style="list-style-type: none"> - Beneficiary must need hygienic/ care - Volunteers must be available to provide service
Normal Flow	<ol style="list-style-type: none"> 1. Beneficiary alerts system that hygienic care is needed 2. System arranges a meeting with a trained volunteer and

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	the beneficiary 3. Care is provided
Alternative Flow	If beneficiary withdraws in the middle of the treatment - System is alerted If no volunteers are available - System alerts all parties
Extension Points	EP1: Give Haircut
Post-conditions	If further care is needed, beneficiary is informed.
Other Requirements	N/A

Use Case Name	Give Haircut
Actors	Volunteer, Wealth-giver, Beneficiary
Description	This use case is designed to give beneficiaries further hygienic care by providing them with a haircut.
Dependencies	Extension of Use Case "Give Haircut"
Preconditions	<ul style="list-style-type: none"> - Beneficiary must be approved by the system for a haircut - Volunteers must be available to provide service
Normal Flow	<ol style="list-style-type: none"> 1. System alerts volunteer that haircut is needed for a beneficiary 2. Beneficiary and volunteer meet and the haircut is given.
Alternative Flow	If beneficiary withdraws in the middle of the treatment - System is alerted If no volunteers are available - System alerts all parties If beneficiary is cut or injured - Beneficiary is taken for medical care - System makes a report
Extension Points	N/A
Post-conditions	N/A
Other Requirements	N/A

Use Case Name	Provide Financial Planning
Actors	Volunteer, Wealth-giver, Beneficiary

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Description	This use case will allow beneficiaries to become more financially stable and also try to provide a secure future.
Dependencies	Implements "Deliver Service <<abstract>>"
Preconditions	- The beneficiary must already have a bank account or a type of investment (real-estate, etc.) on which to receive advice.
Normal Flow	<ol style="list-style-type: none">1. Beneficiary makes a request for financial help2. System notifies trained volunteers3. Beneficiary and volunteer set up a financial plan4. The plan is then implemented on the beneficiary
Alternative Flow	<p>If beneficiary does not follow the plan</p> <ul style="list-style-type: none">- Volunteers warn beneficiary of pulling out from helping them <p>If beneficiary loses money</p> <ul style="list-style-type: none">- System reports to beneficiary to strictly follow all instructions and immediately consult their mentor
Extension Points	N/A
Post-conditions	<ul style="list-style-type: none">- Monitor beneficiaries spending- Keep in contact with beneficiary to motivate good spending and investing habits
Other Requirements	N/A