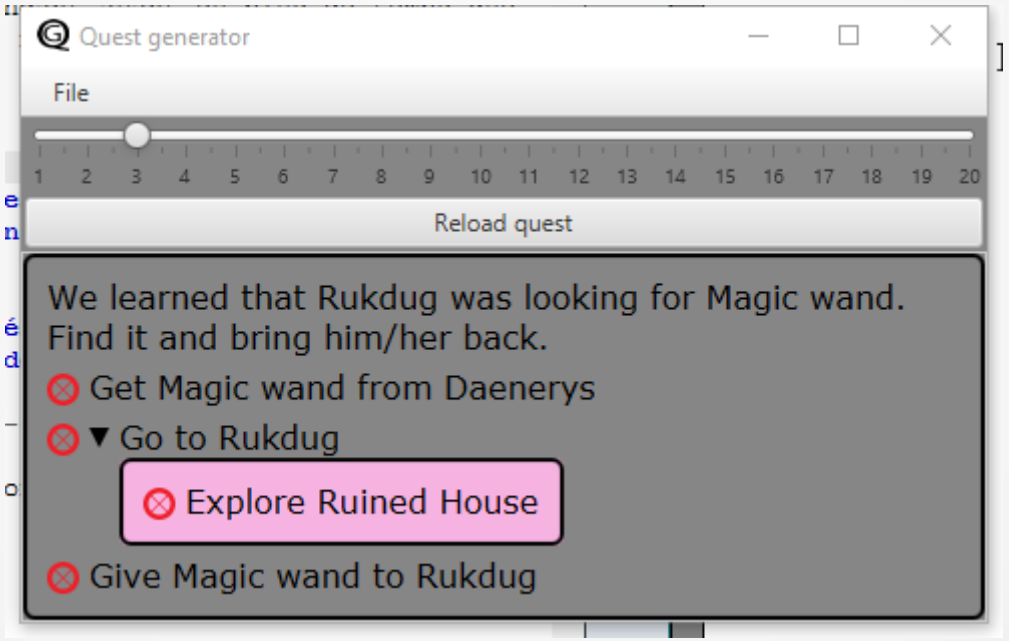
Projet PeiP2 - DI3

« Générateur de quêtes automatique pour la création d'un jeu »

COLEAU Victor – COUCHOUD Thomas

Introduction



Plan

- **L'univers des quêtes**
  - **Les MMORPGs**
  - **Les quêtes**
  - **L'intérêt des quêtes aléatoires**
  - **Étude d'une enquête sur les MMORPGs**
- **Réalisation**
  - **Génération du squelette d'une quête**
  - **Les objectifs**
  - **L'héritage et logique**
  - **Interface graphique**
  - **Gestion de la progression des quêtes**
- **Conclusion**

Les MMORPG

[75] So Far, So Bad
Blight Cauldrons diluted: 0/5
[76] Gluttonous Lurkers
[76] Troll Patrol
Alchemist Finklestein's Task
Captain Grondel's Task
Captain Brandonis Task
Brogo
<Demented>
[2. Trade] [Ladril]: LF2M healers for 10 man Vault
[2. Trade] [Stonecolde]: Mr. T once defeated Chuck Norris in a game of Tic-Tac-Toe. In retaliation, Chuck Norris invented racism.
[2. Trade] [Burstcancer]: LF heals h an
[2. Trade] [Gßaby]: wts [Sash of Jordan] 1100g pst
[2. Trade] [Kaskit]: lol
[1. General] [Mercer]: Desecration is a new guild lfm members of any
[1. General] [Mercer]: Class level 65+. WHo have interests in raiding PST
Quickcowcat, Champion of the Frozen Wastes
DNA
Level 80 Tauren Druid (Player)

Les quêtes

- Permet d'ajouter une histoire au jeu
- Progression du joueur (EXP, récompenses)
- Intérêt du joueur

L'intérêt des quêtes aléatoires

- Positifs :
  - Le nombre de quêtes disponibles pour le joueur est plus important
  - Durée de vie du jeu plus important
- Négatifs :
  - Histoire non présente
  - Quêtes avec moins de sens

Enquête des MMORPG (1)

	Action
1.	ε
2.	capture
3.	damage
4.	defend
5.	escort
6.	exchange
7.	experiment
8.	explore
9.	gather
10.	give
11.	goto
12.	kill
13.	listen
14.	read
15.	repair
16.	report
17.	spy
18.	stealth
19.	take
20.	use

Motivation	Strategy	Sequence of Actions
Knowledge	Deliver item for study	<get> <goto> give
	Spy	<spy>
	Interview NPC	<goto> listen <goto> report
	Use an item in the field	<get> <goto> use <goto> <give>
Comfort	Obtain luxuries	<get> <goto> <give>
	Kill pests	<goto> damage <goto> report
Reputation	Obtain rare items	<get> <goto> <give>
	Kill enemies	<goto> <kill> <goto> report
	Visit a dangerous place	<goto> <goto> report
Serenity	Revenge, Justice	<goto> damage
	Capture Criminal(1)	<get> <goto> use <goto> <give>
	Capture Criminal(2)	<get> <goto> use capture <goto> <give>
	Check on NPC(1)	<goto> listen <goto> report
	Check on NPC(2)	<goto> take <goto> give
	Recover lost/stolen item	<get> <goto> <give>
	Rescue captured NPC	<goto> damage escort <goto> report
Protection	Attack threatening entities	<goto> damage <goto> report
	Treat or repair (1)	<get> <goto> use
	Treat or repair (2)	<goto> repair
	Create Diversion	<get> <goto> use
	Create Diversion	<goto> damage
	Assemble fortification	<goto> repair
	Guard Entity	<goto> defend
Conquest	Attack enemy	<goto> damage
	Steal stuff	<goto> <steal> <goto> give
Wealth	Gather raw materials	<goto> <get>
	Steal valuables for resale	<goto> <steal>
	Make valuables for resale	repair
Ability	Assemble tool for new skill	repair use
	Obtain training materials	<get> use
	Use existing tools	use
	Practice combat	damage
	Practice skill	use
	Research a skill(1)	<get> use
	Research a skill(2)	<get> experiment
Equipment	Assemble	repair
	Deliver supplies	<get> <goto> <give>
	Steal supplies	<steal>
	Trade for supplies	<goto> exchange

Table 3: Strategies for each of the NPC motivations from Table 1 using actions from Table 4.

Enquête des MMORPG (2)

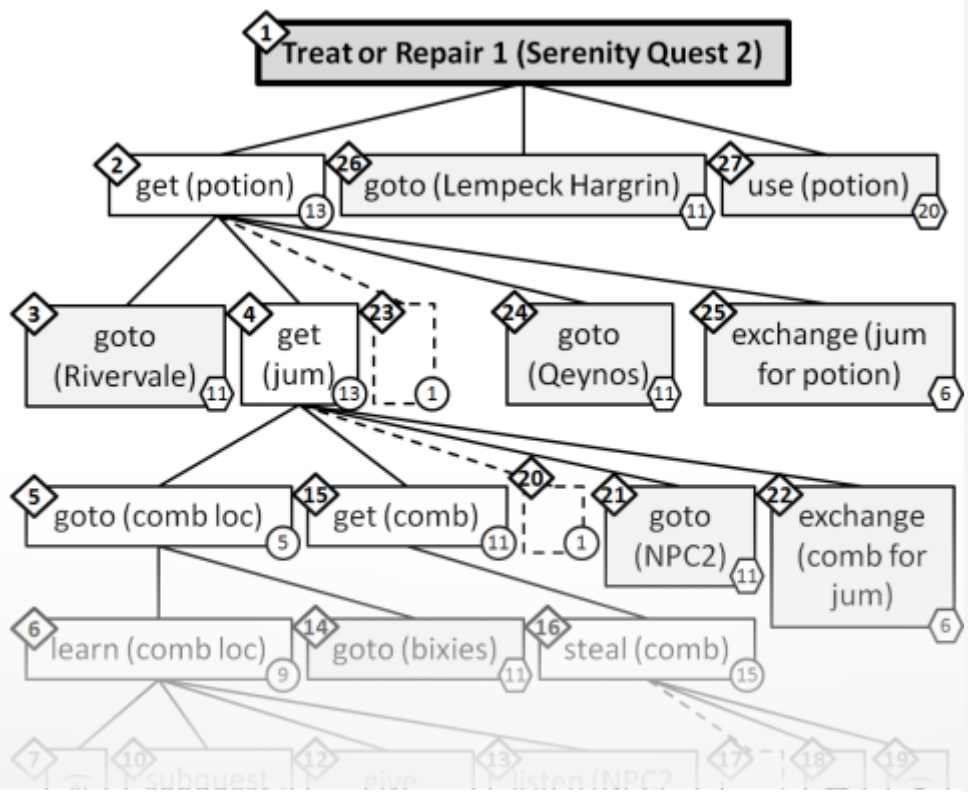
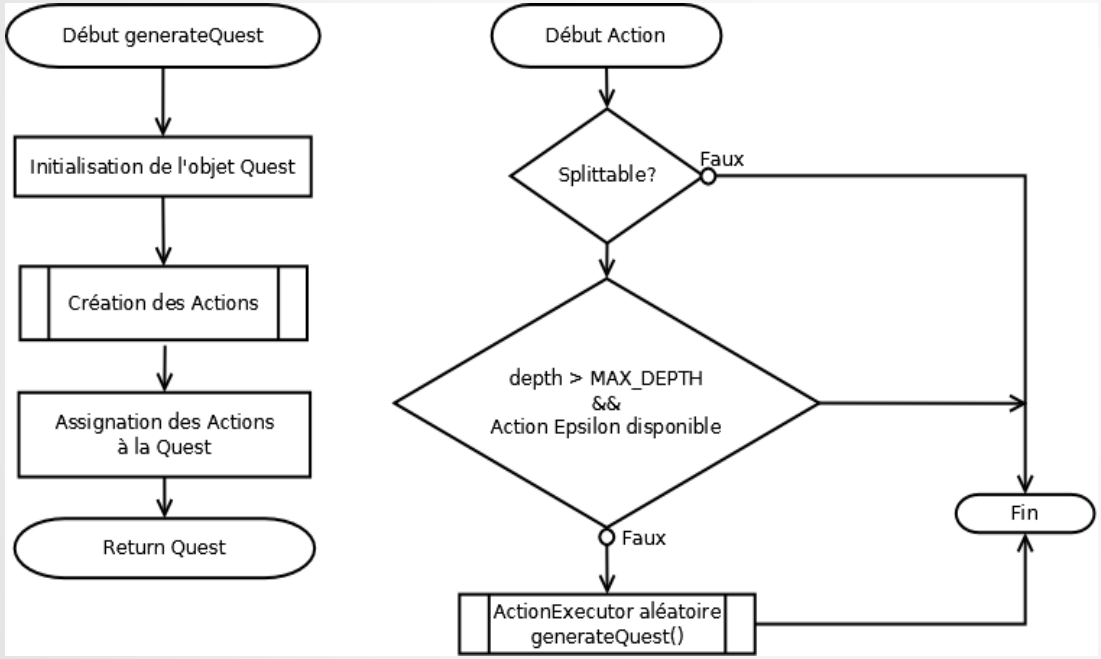


Figure 3: Analysis of "Cure for Lempeck Hargrin" from Everquest.

Réalisation du squelette d'une quête

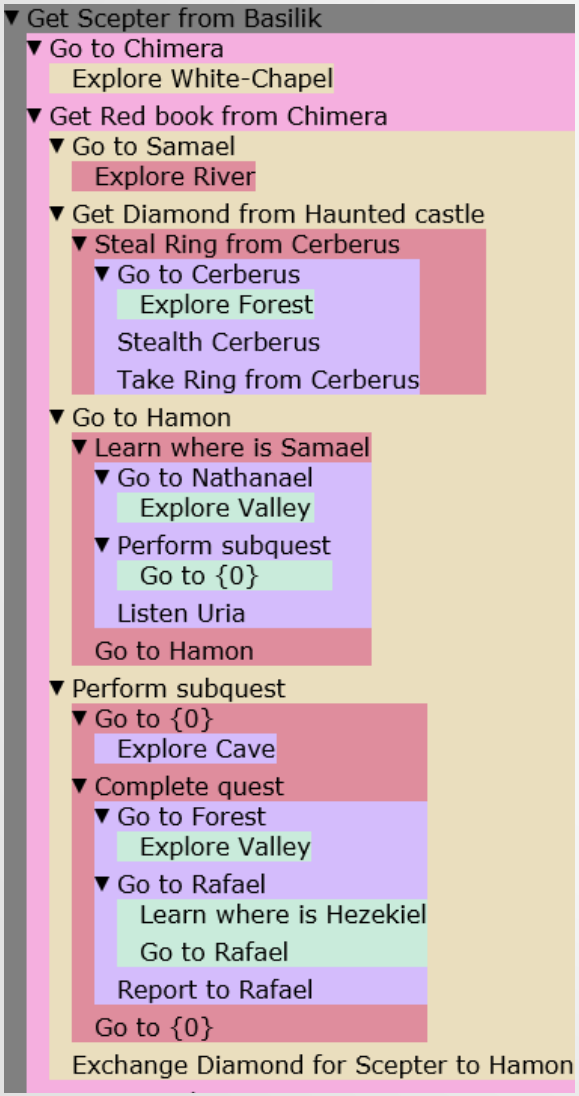



```
Go to {0}
    Learn where is {0}
        Get {0} from {1}
            Go to {0}
                Learn where is {0}
                Go to {0}
                    Explore {0}
            Get {0} from {1}
                Steal {0} from {1}
            Go to {0}
                Explore {0}
            Perfom subquest
                Go to {0}
            Exchange {0} for {1}
        Perfom subquest
            Go to {0}
                Explore {0}
        Give {0} to {1}
        Listen {0}
    Go to {0}
Get {0} from {1}
    Go to {0}
        Explore {0}
    Gather {0}
```

Les objectifs – Fichier XML

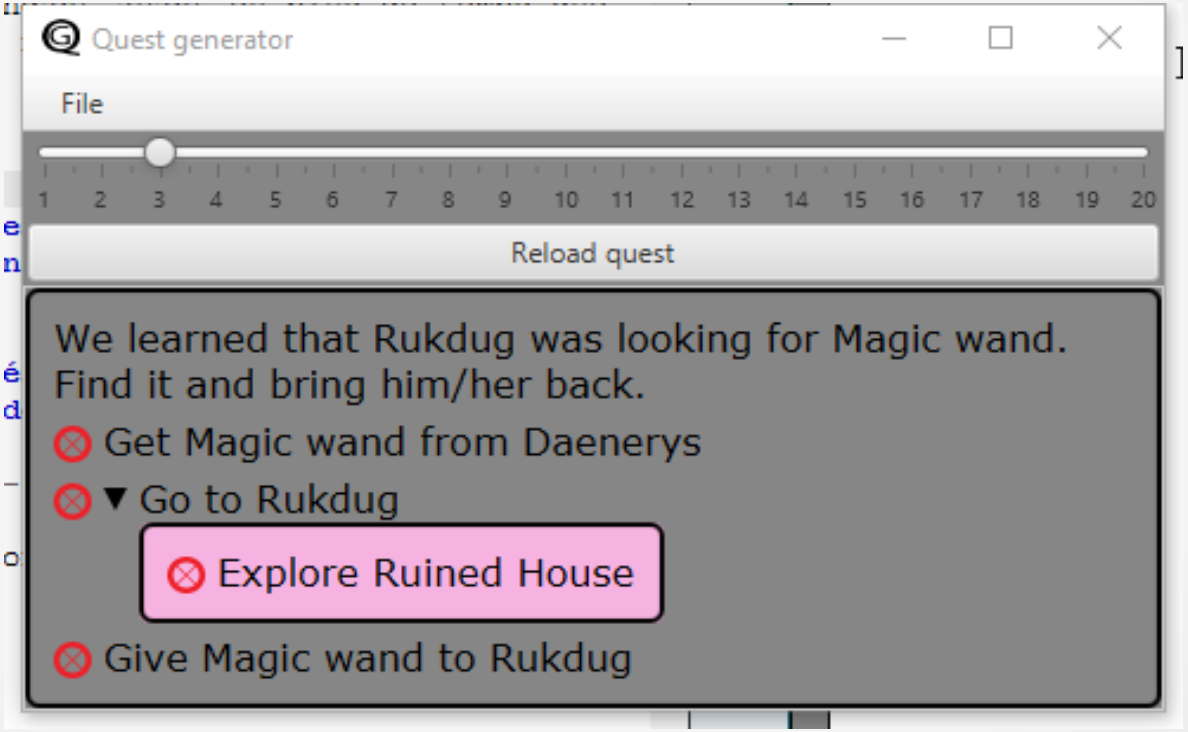
```xml
<?xml version="1.0" encoding="UTF-8"?>
<strings>
    <category value="area">
        <category value="wild">
            <element value="Forest"/>
            <element value="Valley"/>
            <element value="Mont"/>
            <element value="Cave"/>
            <element value="River"/>
            <element value="Ocean"/>
            <element value="Sea"/>
            <element value="Lake"/>
            <element value="Jungle"/>
            <element value="Snowy mont"/>
            <element value="Bridge"/>
            <element value="Haunted castle"/>
            <element value="Ghost city"/>
        </category>
        <category value="place"...>
        <category value="wonder"...>
        <category value="dangerous"...>
        <category value="job"...>
        <category value="fortification"...>
        <category value="mine"...>
    </category>
    <category value="object"...>
    <category value="pnj"...>
    <category value="skill"...>
</strings>
```

L'héritage et logique

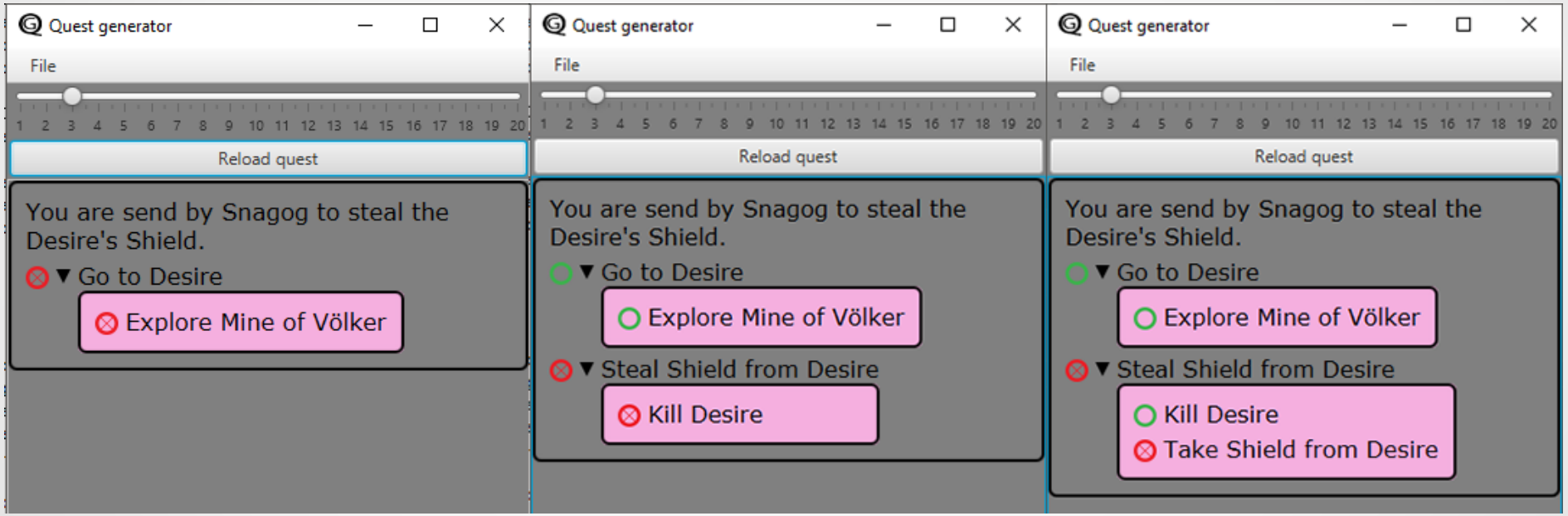


- Passage des objectifs entre action parent et quête fille
- Génération de nouveaux objectifs en fonction de ceux déjà présents
- Changement de décompositions
- Filtrage des décomposition possibles selon les objectifs
- Filtrage des décomposition si sous-quête ou non

Interface graphique



Gestion de la progression des quêtes



Conclusion

- **Projet de manière autonome**
- **Travail de groupe**
- **Programme opérationnel**