# System programmation Project – Deliverable

- **Deliverable 2: EasySave Graphical Version – UML Diagrams + User Documentation**

Context of the project:

**V1:**

Your team has just joined the software publisher ProSoft.

Under the responsibility of the CIO, you will be responsible for managing the "EasySave" project which consists of developing backup software.

Like any software in the ProSoft Suite, the software will fit into the pricing policy.

- Unit price: 200 € HT

- Annual maintenance contract 5/7 8-17h (updates included): 12% purchase price (tacit renewal annual contract with revaluation based on the SYNTEC index)

During this project, your team will have to ensure the development, the management of the major and minor versions, but also the documentation (user and customer support).

**V2:**

EasySave v1.0 has been distributed to many customers.

Following a customer survey, the management decided to create a version 2.0 with the following improvements:

1- Graphical Interface
2- Backup works not limited.
3- Encryption of the backup data
4- Log file evolved.
5- Work software

Summary of the document :

1- UML Diagrams v2
2- UserDocumentation v2
3- Annexs
4- Meeting reports

## 1- UML Diagram v2

The following diagrams have been realised for the version v2.0 of "EasySave", a few things have changed from the versions v1.0. The most important changes are on the classes diagram. You can find it on the previous deliverable.
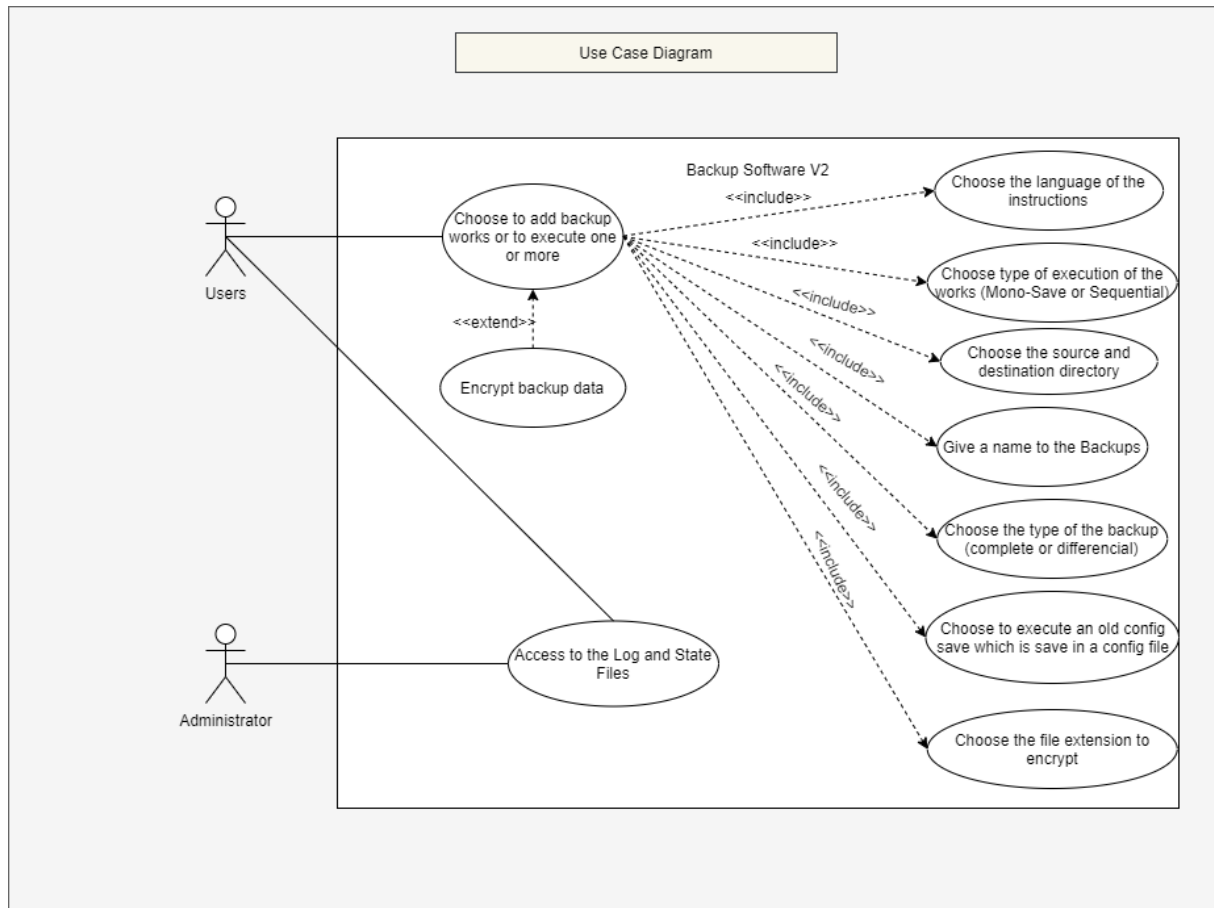
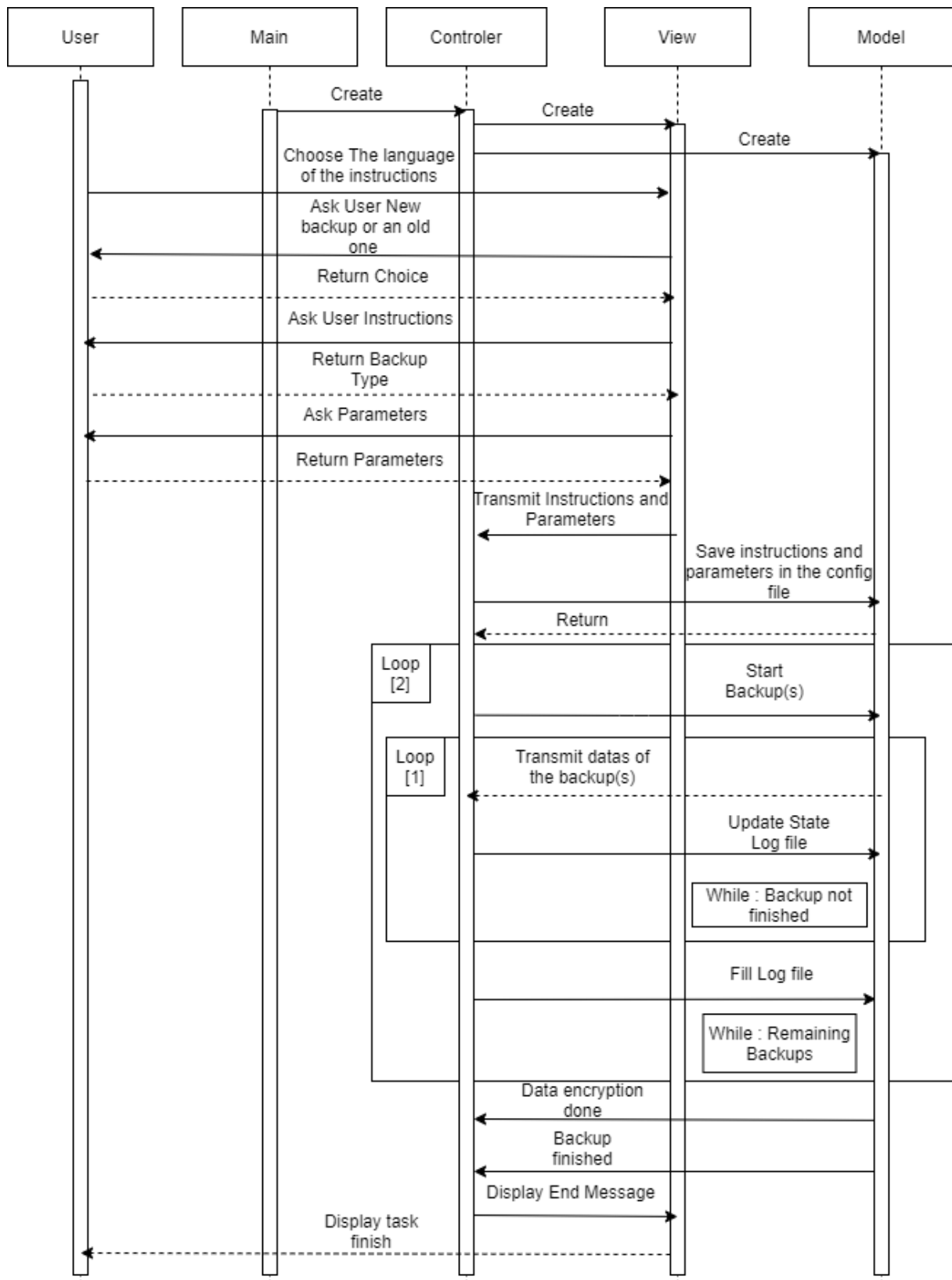Use case diagram v2:



*Figure 1 - Use Case Diagram v2.0*

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## Sequences diagram v2:



*Figure 2 - Sequences Diagram v2.0*

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## Activities diagram v2:



**Activities Diagram**

- Choose the language of the instructions
- Choose to add a new backup work or to select an old one
  - [Old Work] → Select an old backup work from the config file
  - [New Work] → Choose the type of the backup
- Choose the type of the backup
  - [Valid Type]
  - [Invalid Type]
- Define Backup(s) Name(s)
  - [Valid Name(s)]
  - [Invalid Name(s)]
- Specify source and destination directory
  - [Source or Destination File available]
  - [Source or Destination File unavailable]
- Choose file extension to encrypt
  - [Valid type]
  - [Invalid type]
- Carry out a new backup ?
  - [Yes]
  - [No]
- Backup(s) Started

*Figure 3 - Activities Diagram v2.0*

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*Classes diagram v2:*

You can find the Classes diagram in a good quality in the previous deliverable, cause the diagram has big dimensions and cannot be read correctly on a pdf document.

We have not carried out new modifications from the previous deliverable. We have planified good classes, methods so in conclusion we do not have to add modification.
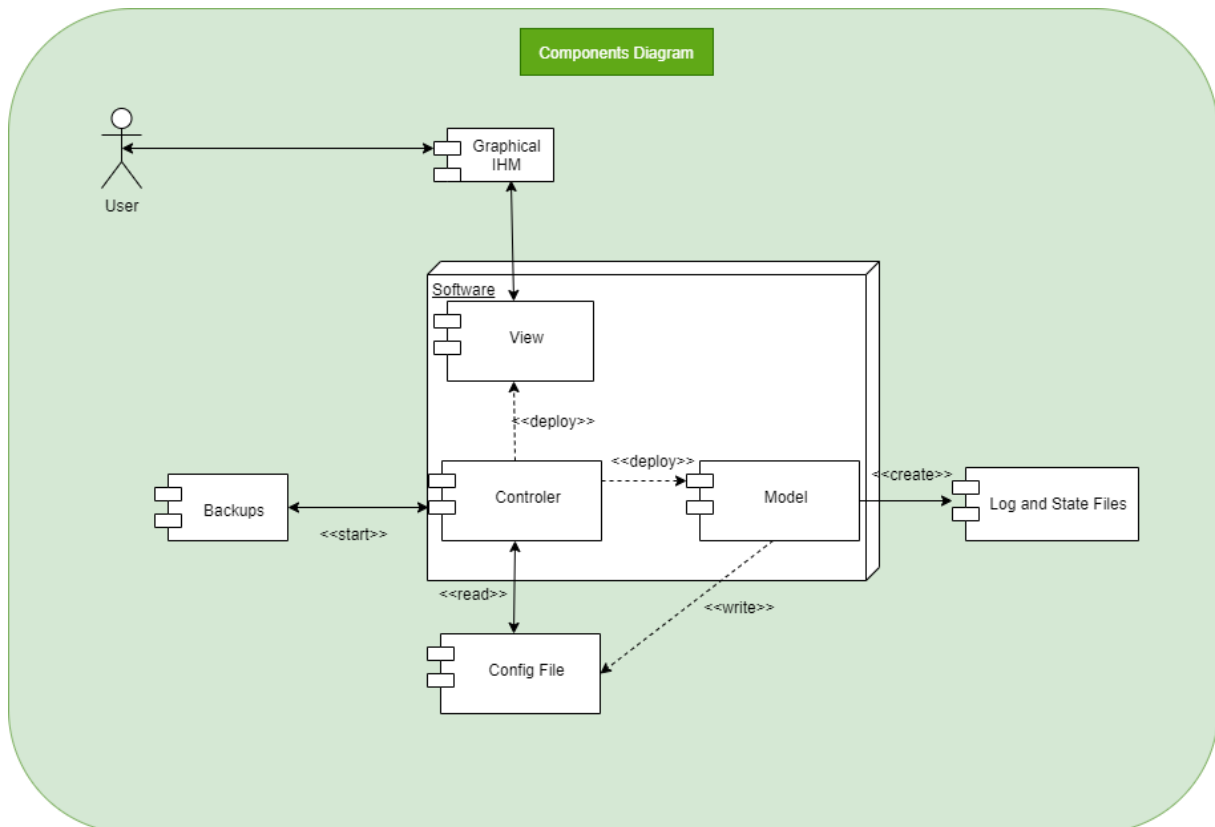
Components diagram v2:



*Figure 4 - Components Diagram v2.0*

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## 2- User Documentation v2

We finally finished to develop the v2 version of our software "EasySave"! In this part we will see how to use the new version of our software and the different functionality available on it.

We will start by the presentation of the graphical window.
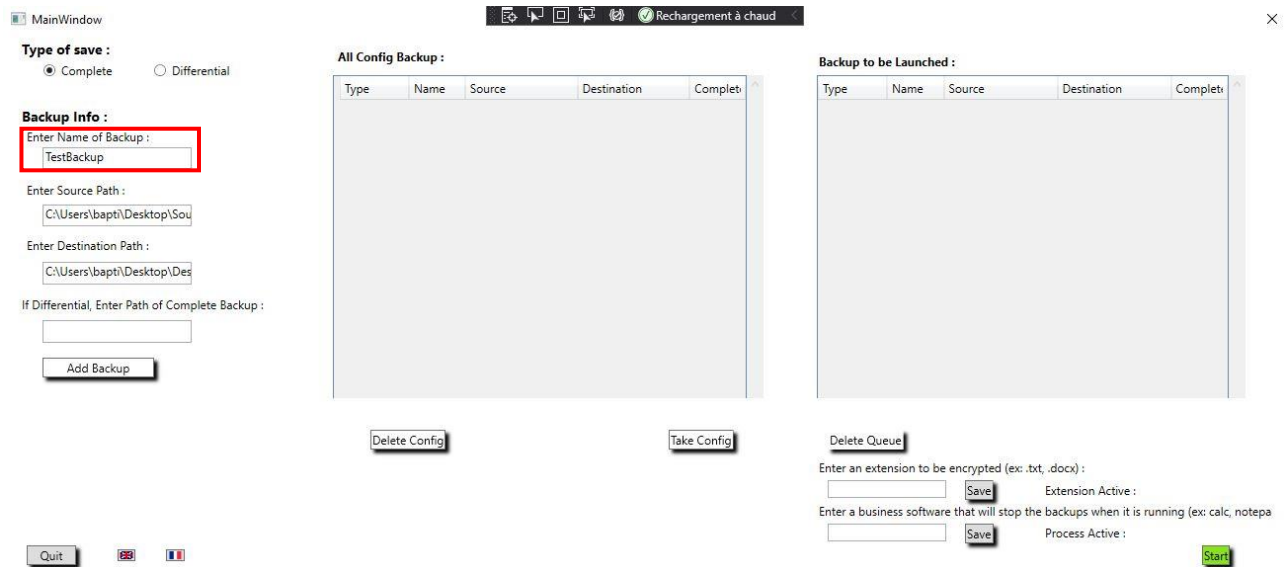


*Figure 5 - MainWindow EasySave*

There it is! You can see the new version of our software. The functionality available are:

1. Execute Complete or differential backup.

2. Add or Select a Backup to execute

3. Execute One or More Backups.

4. Encrypt file with the extension of your choice.

5. Define a process which cancel the backups when it is turns on.

We will now explain you how to execute a backup and use the different functionality.

Our backup presentation will be called: TestBackup

You must define the source path and the destination path of your save.

We want to execute a backup of the following directory:
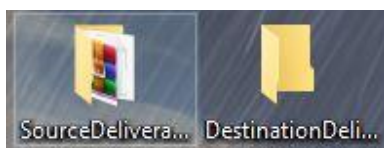


*Figure 6 - Source And Destination folders*

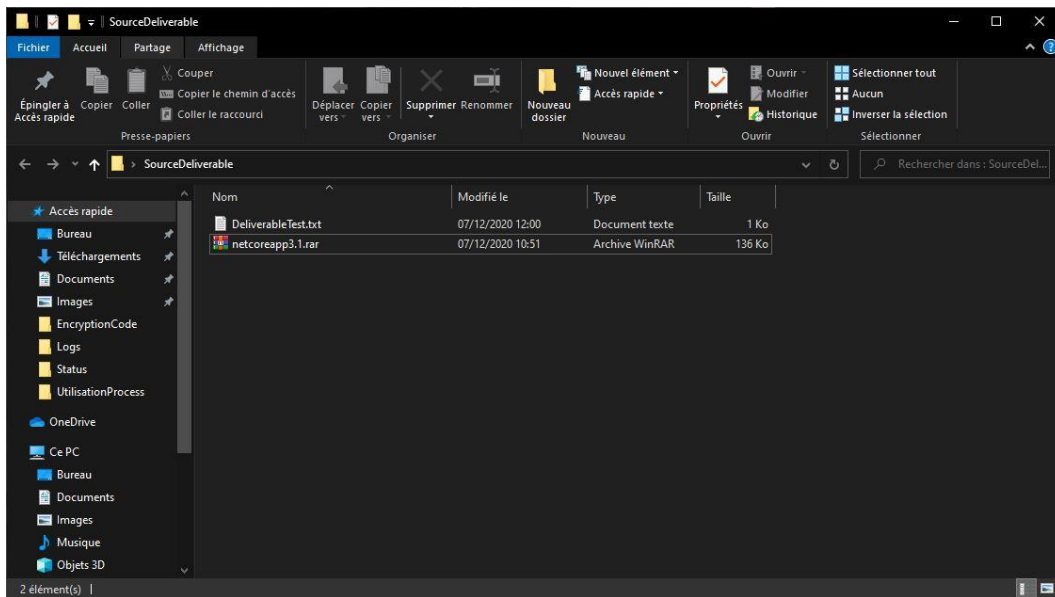HIBERT Florian – FAVIER Paulin – GUILLEMET Baptiste

*Figure 7 - Content of source folder*

SourceDeliverable will be the directory to save, and DestinationDeliverable will be the location of the backup.

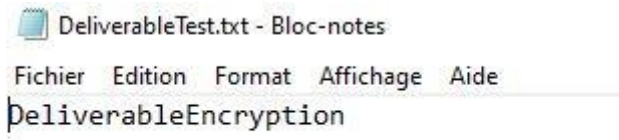Below we can see the content of SourceDeliverable with his text file:



*Figure 8 - Text to encrypt*
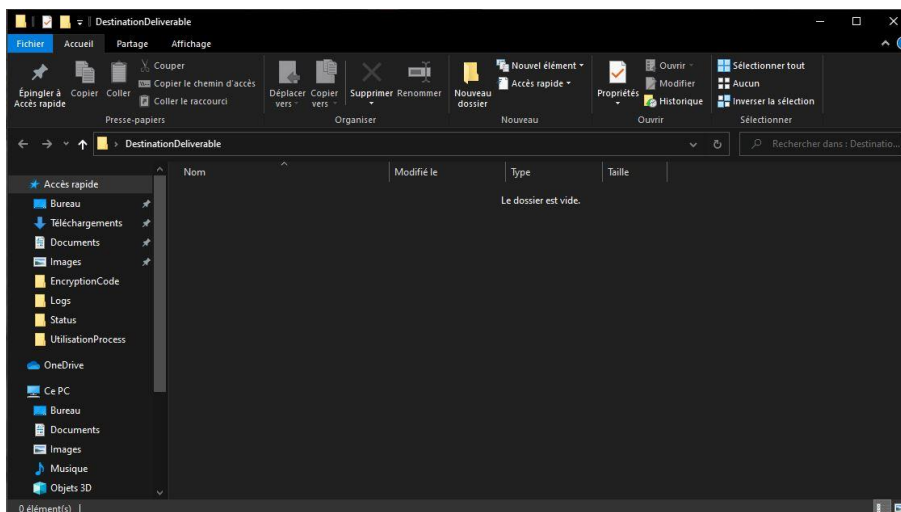
The destination folder is empty:



*Figure 9 - Destination empty*

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Now we can start our backup!

In the page 6 we have define the name of the backup and the source and destination path, if you want to execute a differential backup, you must identify the path of the complete save.

Then we must click on "Add backup".



*Figure 10 - Added Backup*

A pop-up will appear on your screen to confirm the addition of the backup.

After that we will be able to see our backup config in the menu:



*Figure 11 - Config Backups*

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And then we can add another backup config or choose to execute the config and/or add an encryption on the file which got the extension define there. In our test we will choose to encrypt a .txt file.



*Figure 12 - Backup ready to be start*

We have added the backup for execution with button "Take Config" and we have saved the extension for encryption. We can also choose a Process which will interrupt the backup if he is turned on. None will be defined in this test.
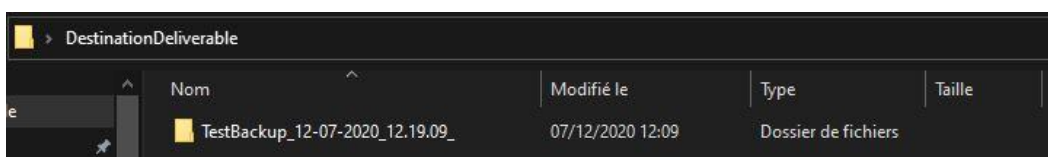
And now we just must press "Start".

This is the result:



*Figure 13 - Backup Done Destination Folder*

The backup has been correctly done, let us check all the files for confirmation.

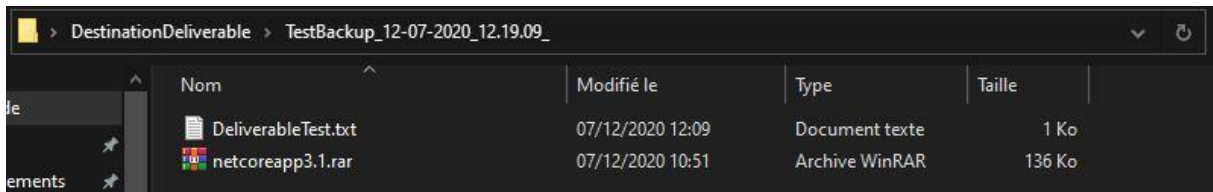HIBERT Florian – FAVIER Paulin – GUILLEMET Baptiste

*Figure 14 - Content of the save*

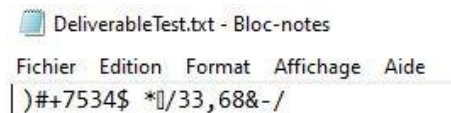The .rar file and .txt are present, we must verify if the encryption have correctly been done:



*Figure 15 - Text encrypted*

The encryption has perfectly been done.

Now let us look at the state and log file.

```
{
  "Timestamp": "12-07-2020_12.19.09_",
  "NameOfSave": "TestBackup",
  "SourcePath": "C:\\Users\\bapti\\Desktop\\SourceDeliverable",
  "DestinationPath": "C:\\Users\\bapti\\Desktop\\DestinationDeliverable",
  "SizeOfSave": 138626,
  "TransfertTime": "00:00:00.1744387",
  "TimeEncryptionTransfert": 0.0099496
}
```
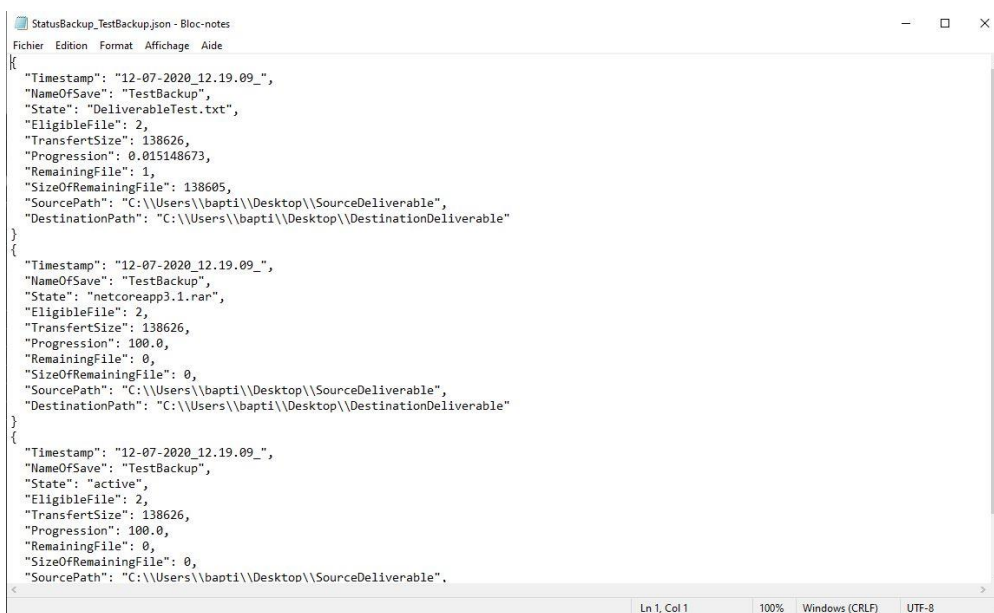
*Figure 16 - Log file filled*



*Figure 17 - State file filled*

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We have finished the presentation! I hope our software will be useful to you or your company and we are ready to prepare another version of "EasySave"!

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## Annexes:

## Meeting reports:

Only one meeting has been done this week, the report is on the next page. The meeting report is in French.

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# Meeting Report 1

<u>Participants :</u>  FAVIER Paulin, HIBERT Florian et GUILLEMET Baptiste

Date et Horaire de réunion :

07/12/2020 : 8h00 – 12h00

<u>Sujet abordés :</u>

Mise en commun des différents systèmes développés depuis la dernière réunion à l'oral.

Paulin a réalisé dans un premier temps – Interface Graphique + ajouts de différentes fonctionnalités comme par exemple le fichier de config des sauvegardes, le processus métier, reprise de la vue pour la mise en place de la responsivité du logiciel afin que celui-ci soit utilisable en anglais et en français donc mise en place multilingues.

Florian a quant à lui réaliser l'apparence graphique du logiciel en intégrant les différents blocs et en préparant le template afin qu'il soit utilisable et paramétrable ensuite via du code.

Baptiste a effectué dans un premier temps en fin de semaine la réalisation du livrable de présentation des diagrammes UML de la version v1.1 et v2.0 ainsi que le développement de Crypto Soft et son intégration dans le code.

Enfin mise en commun de toutes les parties du logiciel et intégration des finalisations, correction des fautes d'orthographes, ajout de commentaires, etc.

Début de la finalisation du livrable pour la documentation utilisateur à rendre pour le soir du 07/12/2020.

Enfin mise en place de phase de tests par tout le groupe afin de valider le rendu du projet, et de vérifier que des erreurs ne se soient pas glisser dans le programme.

Validation du projet à 12h00.

Rédaction et mise à disposition des programmes, du GitHub et de ce livrable pour le tuteur et les utilisateurs de « EasySave ».