

SPRINT 3 DOCUMENTATION

Group 15

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Website: https://capsulefy04.herokuapp.com

GitHub: https://github.com/pabreblob/capsulefy/releases (Release 4)

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Introduction

The aim of this document is to provide information about the planification for this third sprint, the tasks that have been carried out and their results, as well as the conclusions the development team has arrived to after these two weeks. A quick overview of the business idea, team roles and costs is also provided, but for more extensive information about this topic please refer to the "Devising a project" document.

Business Idea

Capsulefy is an online time capsule that allows users to store their memories and share them in the future. Users will be able to create a time capsule, attach a message to it, load files such as videos or images into it and set a date when they want the capsule to be released.

The capsules can also be connected to the user's social networks so that a message is automatically posted when the capsule is published. Users will also be able to select a list of emails that will receive a notification message.

One of the main selling points of our product is allowing people to leave a message behind in case they pass away. For this reason, we will offer a dead-man switch option that once activated, will automatically release the capsule regardless of its publication date if the user hasn't refreshed the counter after a certain period of time.

Our capsules also offer extra features such as the possibility of splitting them into different modules, each of them with a different release date, or making them private so that they won't appear when listing the capsules.

We will be offering two different types of capsules: Free and premium capsules.

Each registered user will be able to create free capsules and upload files to them up to a maximum of 20mb in total. These capsules can be scheduled up to one year in the future and will be deleted 6 months after their release. These capsules can't be made private, split into modules or have a dead-man switch set up

Premium and modular capsules will cost 11.99 € each, can store up to 500mb of files and will not have a limit on how far into the future they can be scheduled, nor will they disappear after being released.

Development team

Our team is composed by five members, each one with different roles and responsibilities:

- Pablo Rebollo Lobo. His roles are project manager and backend developer. His main technological competencies are Spring, Django and PHP.
- Adrián Cantón Fernández, whose roles are business manager and full-stack developer. His main technological competencies are Django, Java and Bootstrap.
- Daniel Carpio Camacho, analyst and frontend developer. His main technological competencies are Django, JavaScript and Bootstrap.
- Juan Rodríguez Regidor, whose roles are requirements engineer and backend developer. His competencies are Django, Python and Bootstrap.



 Rafael Fresno Aranda. His role is backend developer and will also be in charge of the interaction of our product with other applications. His main technological competencies are Node.js, Django and PHP.

Our commitment as a team is to develop our business idea in order to create a minimum viable product in a good enough state so that it can receive appropriate feedback to decide whether or not release the full version to the market and apply that feedback to improve our product.

To reach this goal, we are compromised to meet the deadlines, listen to the feedback and cooperate within the team so that we can provide a product that meets our quality standards.

Competitors analysis

We did a market research in order to determine which existing online services our product will be competing with, which are their main features and what makes our product different from them. We found 4 other similar services. The results of comparing them to our product are the following:

| | Viajeros en el tiempo | Mytimecapsule | Miigen | thetimecapsule | Capsulefy |
|-------------------------------|--------------------------|---------------|----------|----------------|-----------|
| Automatic content publication | ~ | ~ | × | ~ | / |
| Free version | / | / | / | / | / |
| Premium version | / | / | X | X | / |
| Images | / | / | / | | / |
| Videos | / | / | / | X | / |
| Social network interaction | × | × | × | × | / |
| Dead man switch | X | X | X | × | / |

Figure 1: Competitors analysis table

We reached the conclusion that we are treading into an already existing market, but an undeveloped one, where we can offer features that makes us distinct from our competitors, such as the interaction with social networks and the publication of content in case the user has not logged in for a very long time.

There are other indirect competitors, such as official last wills or more traditional methods of sharing memories like photo albums, but they won't be able to offer the possibility of quickly sharing their contents online.

The innovation of our app are these two features no other application similar to us provides: The dead man switch and social network interaction. While the development of these features does not imply that we are innovating from a technological viewpoint, since we will be using already existing technologies (OAuth, API calls...), the way we are incorporating them into our business model is something new that has not been tried by our more direct competitors. Thanks to these features, our service is highly customizable so that every user can tailor their time capsules to their needs.



Cost estimation

Because we will be using Google Firebase to store all the files our users will upload to our system, we need to take into account the individual cost per user. By using Amazon S3, we will be charged 0.026 USD per GB per month.

Assuming we will be offering 500mb of storage in each of our Premium/Modular capsules, the cost of maintaining each 500mb capsule yearly is 0.156 USD (0.14€).

Assuming free users have 20 mb of storage, the yearly cost of maintaining a free user will be of 0.00624 USD (0.0127€).

In order to decide our storage and hosting funds, we will consider the cost of maintaining 2,000 premium capsules and 20,000 free users for a year, as well as an estimation of the cost of hosting our website and our database.

Our team has come up with 4 different cost estimations: A pessimistic one, an optimistic one, and two realistic estimations. These estimations cover costs during the development of our product, whose duration will be of 4 months, and some funds which may be used in order to deal with the risks that appear during the development or to cover initial server and advertisement costs. The factors that will affect our budget are the following:

- Team members' salaries.
- Hardware amortization.
- Advertising funds for the first 6 months.
- Storage and hosting funds for the first year.
- Risk prevention funds.
- Taxes.
- Maintenace and customer service for the first year

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Assuming we will be offering 500mb of storage in each of our Premium/Modular capsules, the cost of maintaining each 500mb capsule yearly is 0.156 USD (0.14€).

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As for advertising funds, firstly we have to determine a target audience. Our product is targeted to people who regularly uses internet and social media. The age segments targeted are young people and middle-age people.

Our goal is to advertise ourselves on the internet. For that reason, we will be using google ads. Because we offer integration with Facebook and Twitter, reaching out to the users of these platforms is also considered a key aspect of our marketing strategy.



Google ads charge business for each time their advertising is clicked. Each business can set how much they can be charged, and depending the price set, their ad will be more visible.

Because we are a small company, we will be setting the cheapest price possible within the range of prices our possible competitors for that ad spot pay, which is one of around 220€ per month, with an estimated performance of 137-229 clicks per month

Facebook also allows us to customize how much would be willing to spend on a weekly basis. We have decided to spend about 140€ monthly for a Facebook advertisement which targets people of between 18 and 50 years old.

Same as Facebook, Twitter allows us to set a daily price. We will be using a similar budget to the one for Facebook, 5€ daily, which means ~150€ monthly for an audience between 18 and 49 years old.

In conclusion, we will be spending approximately 510€ monthly in advertisement. If in our project costs we are going to include the cost for the first 6 months, we will have a total cost of 3060€.

After these first 6 months, we will evaluate how this approach is performing, and depending on that we will decide whether increase or decrease our budget.

One of the members of the development team will assume the responsibility of complying with the GDPR, with no effect to his salary, meaning that it won't have an impact in our budget.

Regarding customer service, we will have one person in charge of it after development has ended, at a cost of 15K € a year. The person in charge of customer service will attend to the user's issues, this includes the GDPR related petitions they may make, such as retrieving their personal data stored in our system.

Overall, we expect this project to have a cost of 45K euros approximately.

GDPR

In order to comply with the GDPR regulation, our system offers the following features:

- A user who is registered may delete the capsules he has created, as well as delete all the data related to his account from the "My account" page.
- In case an external actor has data stored in our system by a third party without consent, by sending an email to <u>capsulefy.communications@gmail.com</u> we will investigate the issue and delete said data.
- If suspicious activity is detected, affected users will receive an email in order warn that their accounts may be compromised. Attached to this email there is the url of the page in our website that allows users to change their password.
- A user can ask to receive all the data related to him stored in our system by writing to our contact email using the email address provided when registering to our system.
- Our site has a section that details all these options and explains the data from the users
 that we store and why we store it. It also contains information about the usage of
 cookies. A notification about cookie usage also appears when a user access to our site.
- When a user wants to register to our system, he must accept our terms of service in order to finish the sign up process

With the exception of a user deleting his account and/or capsules, all these tasks are not automated. This mean s that the person in charge of system maintenance and customer service will be the one who manages the petitions of our users.



Development planning

We will develop our product following the SCRUM methodology. The development of our prototype will be split into three sprints. The results generated from each sprint will be the following:

- Sprint 1: Prototype with working core use cases and a piloting plan in order to start gathering feedback.
- Sprint 2. Full working MVP. This means that not only the core use cases will be implemented, but also the payment module, the registration module and the basic admin will be working.
 The core use cases may be to need adapted according to the feedback resulting from the previous sprint.
- Sprint 3: Polished MVP which will take into account all the feedback from previous sprints.

Team members performance measurement

In order to measure our productivity, we will be using Toggl. At the beginning of each sprint, we will have the tasks with their corresponding time estimation. At the end of the week, the estimated time will be divided by the real time invested in that task. This will be the efficacy ratio of this task. For each team member, the mean of their efficiency will be calculated, and it will be the member's performance ratio. If the task is left unfinished, their ratio will be used in order to calculate a member effectivity if its <1, because a unfinished task should only affect negatively to the efficiency ratio of a person and not the other way around. A ratio between 0.8 and 1.2 is considered the expected performance.

A ratio between 1.2 and 1.5 is considered as more efficient than expected, and a ratio bigger than 1.5 is considered more efficient than desired and the causes for this will be investigated.

A ratio between 0.8 and 0.5 is considered less efficient than expected, and a ratio smaller than 0.5 means that there have been major issues with that task and the reason why will be investigated.

Besides this ratio, it will also be taken into account whether or not a user has finished his tasks, and in case there are some tasks left unfinished, we will try to find out the reason and act accordingly.

In order to measure the project manager's efficiency, we will factor in his performance in his assigned tasks and the overall performance of the team, as one of the project manager's responsibilities is to ensure that the team is working well. The formula that we will be using is the following:

PM tasks performance * average team performance – Total days of delay or anticipation in the tasks*0.1

Reasons why the performance may be better than expected:

- The tasks assigned to a member where easier than expected and therefore, took less time
 than the estimated. It will be taken into account so that he may receive a bigger workload
 in the future and the member will be suggested to review in depth the work he has carried
 out if he finishes it in less time than expected.
- Bad time estimation for that task. For the next set of similar tasks, their estimated time will be reduced until it is similar to the one that carrying out that task took.

If the performance is worse than expected, it is a bigger problem than taking less time than expected. The reasons why this may have happened are the following:



- Bad time estimation, just as when it takes less than it should. The same protocol previously mentioned applies to this case.
- A team member is not working properly. The member will be told that his attitude must change and will be closely monitored for the next set of tasks.
- Unexpected problems or the member did not have the skill required to complete the task in
 that timeframe. If there where unexpected obstacles, these problems and how they were
 solved will be written down in order to easily deal with them should the appear again. If the
 problem was that the team member was simply not able to do the tasks within the estimated
 time, it will be taken into account so that he is not assigned similar tasks and these are
 assigned to more efficient members.

An acceptable ratio is one whose value is between 0.5 and 1.5, if the performance of a member is not contained in that interval, we will know there is a problem that must be urgently dealt with. Regardless, the strategies available Will always be applied so that all the team can reach an optimal efficiency ratio, just with less urgency the closer their ratio is to the ideal.

Moreover, in order to know the improvement of our performance and estimations each week, we will divide the average performance of the current week between the performance of the previous week.

The classification will be the same as the other measures (<0.5 Mean we have worsened a lot,0.5/0.8 means this week has been a bit worse, 0.8/1.2 means we have remained the same, 1.2/1.5 means the performance has been better and >1.5 means that the performance has been much better but this also implies the planification could have been better.) Our goal is to at least maintain the performance, ideally, we want to improve it without exceeding 1.5

Code coverage

For this sprint, our development team will be using coveralls to test our code coverage. A badge will be added to the README of the git repository to showcase the code coverage of the project. Less than 50% of coverage is considered bad, between 50% and 75% is considered mediocre, between 75 and 85% is considered good and more than 85% means that the code coverage is excellent.

Improvement actions taken from previous sprints

Firstly, when planning, we will divide our workload into smaller tasks with shorter duration. In order to measure if this is helping us improve, we will look at 4 things:

- Performance ratio.
- Maximum delay in days out of all the tasks. Maximum delay acceptable: 2 days.
- How many hours did each task take. Maximum hours per task: 6 hours.
- How many days did each task take. Maximum days per task: 6 days

If any of these thresholds is reached, that means we did a bad time estimation and should have probably divide these tasks into smaller ones.

More documentation of bugs and issues:

Each bug or problem found should be documented in our repository wiki. An acceptable number of wiki entries is around 4 and above.

Deploy at least two days before the deadline in order to have enough time to react if something goes wrong.



Track the amount of bugs detected in our system, we will look at the ratio of GitHub issues tagged as "bug" divided by the number of normal issues.

Check that there are no conflicts with the data the system is pre-populated with.

Plan the pilot user cycle so that we have their feedback before a class presentation.

Sprint 3 initial planning

Week 1 (April 22nd-April 28th)

| Task | Start Date | Estimated End Date | Team member | Time estimated |
|---|-------------|-----------------------|-------------|-------------------|
| Initial meeting, review user's feedback | April 22nd | April 22nd | All members | 1.5h |
| Improve checkboxes | April 22nd. | April 22nd. | Daniel C. | 2h |
| Coverage tests | April 23 | April 23 | Rafa | 1h |
| Add more unit tests | April 23 | April 24 | Adrian | 5h |
| Improve responsive design | April 23nd | April 26th | Daniel C. | 1h |
| Improve demo videos | April23 | April 25 | Adrian | 1h |
| Add datepicker to all date fields | April 23 | April 24 | Juan | 0.5h |
| Fix sign up messages | April 24 | April 25 | Juan | 0.5h |
| Update costs | April 24 | April 25 | Pablo | 1.5h |
| GDPR | April 24 | April 24 | Pablo | 2h |
| Improve return button | April 24 | April 25 | Dani | 0.5h |
| User friendly 404 page | April 24 | April 25 | Dani | 0.5h |
| Notification mail separation in capsule forms | April 24 | April 24 | Dani | 1h |
| Landing page content | April 24 | April 25 | Juan | 1.5h |
| Fix images proportions in capsules | April 24th | April 25th | Daniel C. | 0.5h |
| Test automation results | April 25 | April 26 | Pablo | 1.5h |
| Improve dashboard | April 25th | April 26th | Juan R. | 2h |
| Review populate | April 25th | April 25th | Pablo R | 1h |
| PowerPoint | April 26th | April 28th | Rafael F | 3h |
| Advertisement video | April 27 | April 28 | Pablo | 2h |
| Rehearsal | April 28th | April 28th | Pablo R | 1h |



Week 2 (April 29th-May 3rd)

| Task | Start Date | End Date | Team member | Time estimated |
|--|----------------|-------------|--------------------|-------------------|
| Meeting to discuss class feedback | April 29th | April 29th | All members | 1.5h |
| Improve firebase application | April 29th | April 30th | Adrián C | 2h |
| Improve automation | April 29th | April 30th | Pablo R | 2h |
| Add contents of our landing site to our deployed app | April 29th | April 30th. | Daniel C. | 3h |
| Add datepicker in user sign up form | April 29th | April 30th. | Daniel C. | 0.5h |
| Fix Social Network problems | April 29th. | April 30th. | Rafael F. | 2h |
| Fix backend related problems | April 29th | April 30th | Juan R. | 2h |
| Review populate | April 30th | April 30th | Juan R. | 1h |
| Deploy application | May 1st | May 1st | Adrián C | 2h |
| Test the deployed application | May 1st | May 3rd | Daniel C Juan R | 2h each |
| PowerPoint | May 1st | May 3rd | Rafael F | 5h |
| Pilot user form | May 1st | May 3rd | Pablo R | 1.5h |
| User manual | May 1st | May 3rd | Pablo R | 1h |
| Sprint 3 retrospective documentation | May 1st | May 3rd | Pablo R | 4h |
| Rehearsal | May 3rd | May 3d | Pablo R | 1.5h |

Sprint 3 status after Week 1 (April 28th)

The tasks planned were carried out successfully. There was a 1 day delay in two different tasks, but it did not have an important impact in the development of the project. The status of the tasks at the end of this first week were the following (meetings will be excluded from this analysis, as they all took place within the time estimated):



| Task | Start | Estimated | End date | Team | Time | Time |
|---------------------------|----------------|-----------------|--------------|-------------|-----------|----------|
| | Date | End Date | A 11 00 1 | member | estimated | invested |
| Initial meeting, | April | April 22nd | April 22nd | All members | 1.5h | 1.5 |
| review user's feedback | 22nd | | | | | |
| | ا نسم | Amril | Amril 22md | Daniel C | 2h | 1 7Fb |
| Improve checkboxes | April 22nd. | April 22nd. | April 22nd | Daniel C. | Zn | 1.75h |
| Coverage tests | April 23 | April 23 | April 23 | Rafael F. | 1h | 1h |
| | • | • | • | | | |
| Add more unit | April 23 | April 24 | April 24 | Adrián C. | 5h | 6h |
| tests | ا نم ۸ | A m = 1 2 C + h | April 26th | Daniel C. | 1 h | 1h |
| Improve responsive design | April 23nd | April 26th | Aprii 26tii | Daniel C. | 1h | 111 |
| Improve demo | April23 | April 25 | April 25 | Adrian C. | 1h | 1h |
| videos | April23 | April 23 | April 23 | Aurian C. | 111 | 111 |
| Add datepicker to | April 23 | April 24 | April 24 | Juan R. | 0.5h | 0.5 |
| all date fields | April 23 | April 24 | April 24 | Judii II. | 0.511 | 0.5 |
| Fix sign up | April 24 | April 25 | April 25 | Juan R. | 0.5h | 0.5 |
| messages | 7.01.1.2.1 | 7.023 | 7 (p. 11 2 5 | Juan | 0.01. | 0.5 |
| Update costs | April 24 | April 25 | April 25 | Pablo R. | 1.5h | 1h |
| GDPR | April 24 | April 24 | April 24 | Pablo R. | 2h | 1.5h |
| Improve return | April 24 | April 25 | April 25 | Daniel C. | 0.5h | 0.75h |
| button | | | · | | | |
| User friendly 404 | April 24 | April 25 | April 25 | Daniel C. | 0.5h | 0.5 |
| page | | | | | | |
| Notification mail | April 24 | April 24 | April 24 | Daniel C. | 1h | 1.25h |
| separation in | | | | | | |
| capsule forms | | | | | | |
| Landing page | April 24 | April 25 | April 26 | Juan R. | 1.5h | 1h |
| content | | | | | | |
| Fix images | April | April 25th | April 25th | Daniel C. | 0.5h | 1h |
| proportions in | 24th | | | | | |
| capsules | A '105 | A :1.26 | A :12C | 0.11.0 | 4.51 | 0.51 |
| Test automation | April 25 | April 26 | April 26 | Pablo R. | 1.5h | 0.5h |
| results | April | April 26th | April 27+h | luan D | 2 h | 2h |
| Improve dashboard | April 25th | April 26th | April 27th | Juan R. | 2h | 2h |
| Review populate | April | April 25th | April 25th | Pablo R | 1h | 0.75h |
| Review populate | 25th | Αρι ΙΙ 23 (11 | April 23til | r abio N | TII | 0.7511 |
| PowerPoint | April | April 28th | April 28th | Rafael F | 3h | 3.75 |
| | 26th | | | | | |
| Advertisement | April 27 | April 28 | April 27 | Pablo R. | 2h | 2h |
| video | | | | | | |
| Rehearsal | April | April 28th | April 28th | Pablo R | 1h | 1h |
| | 28th | | | | | |

The analysis of the team performance and its metrics is included in the PowerPoint task.



The performance ratios of our team members at the end of the week were the following:

Adrian: 0.83Daniel: 0.88Juan: 1.1Rafael: 0.93

Pablo (Project manager): 1.09

Comparing the performance of this week with the previous one, we obtained the following results:

This week performance: 0.96
Previous week performance: 1.28
Result of this new metric: 0.75

This means our performance have worsened. However, we are not particularly worried, as the previous week we had an exceedingly good performance, and this week the average is within what is considered optimal performance

After reviewing these ratios, we came to the conclusion that our performance has not improved, but now the time each task takes to be finished is closer to the expected, this means that our estimations are getting better. Taking a look at the other metrics we previously defined in order to measure how good the actions we took from what we learned on previous sprints were:

- Maximum delay in days out of all the tasks: Two tasks had a delay of 1 day, being the limit 2 days maximum.
- How many hours did each task take. The maximum number of hours a task took was 6 hours, which was the limit.
- How many days did each task take. The maximum amount of days a task took was 4 days, the limit being 6 days.

During this week, no issues related to bugs were added.

The code coverage after this week was 78%, which is considered a good coverage by our standards.

With these results, we can say that this week objectives were met, although we will pay attention to the performance of our team in order to maintain or improve our numbers. As for our GitHub wiki, last sprint it only had one entry. As of today, there are 7 entries, explaining how to fix some troubles we have run into and containing the feedback obtained in class.

Problems during the first week

We faced two problems during this week:

- Delay in two tasks. To avoid further delays the project manager will pay more attention to the status of the tasks of the persona who was delayed this week. We will measure this by using the days of delays in the next week
- Facebook. Although not listed as a task, one member of our group investigated how does
 Facebook API works, and Facebook did not make easy for us having a developer account
 (phone number, photo required) also, documentation is very poor. We don't know if we
 will be able to have this for this sprint. Solution: We will start working on this task during
 the second week and leave it unfinished for our project launch sprint. We will measure the



% of completion of this task at the end of the sprint. Less than 50% is considered bad, 50-75% is considered mediocre and more than 75% is considered good.

Feedback received from our pilot users

Pilot user's feedback ranking

We rank the feedback received from our pilot users in three groups:

- High priority: Changes that need to be implemented in order to make sure all our users can go through our core use cases.
- Medium priority: Changes that should be implemented as they make easier for our users to go through our core use cases.
- Low priority: Improvements to improve the page look and feel and improve user experience, but that has very little impact in the ability of our users to go through our core use cases.

On April 6th, we retrieved the forms we handed to our pilot users. Our ten pilot users answered it, and the feedback we obtained is the following:

- It would be interesting to know the creation and publication date of a capsule: We already display the publication date of a capsule. We could make changes in order to store its creation date but because these changes affect our data model, they make cause malfunctions. We will study whether or not apply these changes in Sprint 3 Week 2: Low priority
- When registering to the system, it would be interesting to limit the passwords so they
 must have a minimum length and different types of character: We will apply these
 changes in week 2: Medium priority
- When sharing a capsule, it would be very interesting being able to share it on facebook
 (a lot of people have said this): We are already working on it, but Facebook does not make
 it easy. We are going to try and implement this during Week 2, and if we run out of time,
 during our launch sprint. High priority
- When registering to the system, a date picker to select the birthdate would be better: We have already implemented this improvement in Week 1: Medium priority
- User interface is a bit simple. Things like a favicon are missing and some graphics could improve contextual menus: For week 2, add a favicon and try to add more elements to our interface so it is more attractive: Low priority
- When creating a capsule, the name of some fields is different from the ones that appear once it is displayed: For week 2, review the name of these fields and fix them: Medium priority.



Sprint 3 Week 2 reschedule

Having received more feedback from our pilot users, we made some changes to the tasks planned for the second week of the sprint:

| Task | Start date | Estimated end date | Team member | Estimated time |
|---|------------|--------------------|--------------------|----------------|
| Meeting to discuss class and pilot user feedback | April 29th | April 29th | All members | 1.5h |
| Update GDPR | April 29th | April 29th. | Pablo R. | 0.5h |
| Facebook automation | April 29th | May 1st | Rafael F. | 5h |
| Fix navigation header | April 29th | May 1st | Daniel C. | 1.5h |
| Creation and publication date in capsule display | April 29th | May 1st | Daniel C. | 1.5h |
| Accept terms button in user sign up form | April 29th | May 1st | Juan R. | 1.5h |
| Capsule display: Modules correctly numbered | April 29th | May 1st | Daniel C. | 1.5h |
| Remove releases from the main page's index | April 29th | May 1st | Daniel C. | 0.5h |
| Add favicon | April 29th | May 1st | Daniel C | 0.5h |
| Password restriction | April 29th | May 1st | Juan R. | 2h |
| Add option to change password from "My account" | April 29th | May 1st | Juan R, | 2h |
| Change publication mail content | April 29th | May 1st | Juan R. | 0.5h |
| Subtitles in advertisement | April 30th | May 2nd | Pablo R. | 1 h |
| Review populate | May 1st | May 1st | Pablo R. | 0.5h |
| Deploy application | May 1st | May 1st | Adrián C | 1.5h |
| Test the deployed application | May 2nd | May 3rd | Daniel C Juan R | 2h each |
| PowerPoint | May 2nd | May 3rd | Rafael F | 3h |
| Sprint 3 retrospective documentation | May 1st | May 3rd | Pablo R | 4h |
| Rehearsal | May 12th | May 12th | Pablo R | 1.5h |

Sprint 3 status after Week 2 (April May 3rd)

The tasks planned were carried out successfully, with the exception of Facebook integration as it was a task that was not expected to be finished in this week and we ran into further problems. The rehearsal task, although belonging to this sprint, is not taken into account, as it will happen when the presentation date draws closer.



| Task | Start date | Estimated end date | End date | Team member | Estimated time | Time invested |
|---|------------|--------------------|----------------|--------------------|----------------|------------------|
| Meeting to discuss class and pilot user feedback | April 29th | April 29th | April 29th | All members | 1.5h | 1.5h |
| Update GDPR | April 29th | April 29th. | April 29th. | Pablo R. | 0.5h | 0.5 |
| Facebook automation | April 29th | May 1st | - | Rafael F. | 5h | 4.5 |
| Fix navigation header | April 29th | May 1st | May 1st | Daniel C. | 1.5h | 1h |
| Creation and publication date in capsule display | April 29th | May 1st | May 1st | Daniel C. | 1.5h | 1h |
| Accept terms button in user sign up form | April 29th | May 1st | May 1st | Juan R. | 1.5h | 1h |
| Capsule display: Modules correctly numbered | April 29th | May 1st | May 1st | Daniel C. | 1.5h | 1.5h |
| Remove releases from the main page's index | April 29th | May 1st | May 1st | Daniel C. | 0.5h | 0.5h |
| Add favicon | April 29th | May 1st | May 1st | Daniel C | 0.5h | 0.5h |
| Password restriction | April 29th | May 1st | May 1st | Juan R. | 2h | 1.5h |
| Add option to change password from "My account" | April 29th | May 1st | May 1st | Juan R, | 2h | 2h |
| Change publication mail content | April 29th | May 1st | May 1st | Juan R. | 0.5h | 1h |
| Subtitles in advertisement | April 30th | May 2nd | May 2nd | Pablo R. | 1h | 1.5h |
| Review populate | May 1st | May 1st | May 1st | Pablo R. | 0.5h | 0.5h |
| Deploy application | May 1st | May 1st | May 1st | Adrián C | 1.5h | 1.5h |
| Record demo videos | May 1st | May 2nd | May 2nd | Adrián C | 3h | 3h |
| Test the deployed application | May 2nd | May 3rd | May 3rd | Daniel C Juan R | 2h each | 3h each |
| PowerPoint | May 2nd | May 3rd | May 3rd | Rafael F | 3h | 4h |
| Sprint 3 retrospective documentation | May 1st | May 3rd | May 3rd | Pablo R | 4h | 5h |
| StartUS coordination tasks | May 1st | May 12th | - | Adrián C. | 2h | - |
| Rehearsal | May 12th | May 12th | - | Pablo R | 1.5h | - |

The analysis of the team performance and its metrics is included in the retrospective documentation task.



After these two weeks of development, the accumulated cost of our project is the following:

| Project duration | 11 weeks |
|----------------------------------|----------|
| Total spent in salaries | 10484 € |
| Equipment | 292€ |
| Hosting | 0€ |
| Advertising | 0€ |
| First year maintenace | 15000€ |
| Risk prevention fund | 2724€ |
| Total costs | 28500€ |
| Percentage of project completion | 73% |
| Percentage of budget spent | 63% |

Our development cost is lower than expected, but we have not added the hosting and advertising costs yet, so these numbers may be misleading. In our next deliverable the hosting and advertising costs will be factored in, as the development will be finished and we will have a more accurate estimation of these costs.

The performance ratios of our team members at the end of the week were the following:

Adrián Cantón: 1Daniel Carpio: 1.09Rafael Fresno: 0.87

• Pablo Rebollo (Project manager): 0.87

Juan Rodríguez: 0.99

Comparing the performance of this week with the previous one, we obtained the following results:

This week performance: 0.96Previous week performance: 0.96

Result of this new metric: 1

After reviewing these ratios, we came to the conclusion that our performance stayed the same, and it was already considered a good performance. This means all the measures we have taken during previous sprint have bore fruit and now we have a consistently good performance

Taking a look at our other metrics, we see that our performance this sprint has been very positive overall:

- Maximum delay in days out of all the tasks: No tasks were delayed.
- How many hours did each task take. The maximum number of hours a task took was 5 hours.
- How many days did each task take. The maximum amount of days a task took was 3 days.



During this week, no issues related to bugs were added.

The code coverage after this week was 78%, which is considered a good coverage by our standards.

The integration with Facebook could not be completed, and its completion percentage is 40%, which is way less than what we would have liked (at least 50%, ideally 75%)

As for our tests automation, we had a total of 548 Travis builds across all the previous weeks, 373 being successful ones, 133 failed a 42 cancelled.

In our master branch, we have a total of 42 Travis builds: 24 correct, 16 failed and 2 cancelled.

In conclusion, our metrics give us an indicator that during this week the team has worked properly. However, we have the problem of not being able to implement the Facebook integration. Because of this, the conclusion we have reached is that we should have put more effort on this task way earlier.

Lessons learnt

- The biggest problem during this sprint was the failed Facebook integration. This was due to problems to obtain a Facebook developer account, which caused delays. Besides, we found out that the tokens used to connect a Facebook account to an application like ours has a limited duration, which means the usage of this feature is not going to be very attractive to our potential clients, as they will have to renew their tokens every 3 months. What we learned from this is that we should have put more resources into this task earlier instead of delaying it. This way, we could have been able to notice these issues and have more time to react accordingly.
- Thanks to deploying our application 2 days before the deadline, we noticed some errors and had enough time to fix them. We have come to the conclusion that deploying our application early on was indeed a good idea.
- There was a delay in the answers of some of the pilot users to the form that was send to them. In order to avoid this in the last cycle of testing, we will not only send them an email as in previous sprint, but also personally talk to those who we are acquainted with to remind them of their obligation to answer the form.

Items produced as a result of this sprint

Full working MVP of our application, deployed on https://capsulefy04.herokuapp.com

Demo videos of our application, which can be found in our slides. The release of this sprint in GitHub can be found on https://github.com/pabreblob/capsulefy/releases (Release 4).

Updated user manual and pilot user form.

All the documentation related to our Sprint 3, what had we planned, how it progressed and the sprint retrospective.



Project launch initial planning

Because at this point our MVP is already fully working, it is not possible at this point in time to make a more specific planification for this sprint, as a big part of the tasks that will be assigned are related to the feedback we will receive from pilot users and improvements our team can think of.

Week 1 (May 13th-May 19th)

| Task | Start Date | Estimated End Date | Team member | Time estimated |
|---|---------------|-----------------------|-------------|-------------------|
| Initial meeting, review user's feedback | May 13th | May 13th | All members | 1.5h |
| Last chance to implement Facebook integration | May 13th | May 17th | Rafael F. | 5h |
| Record new advertisement spot. | May 13th | May 16th | Daniel C. | 4h |
| Social network advertisement campaign | May 13th | May 16th | Juan R | 3h |
| Final cost estimation, decide service pricing | May 13th | May 16th | Pablo R. | 1.5h |
| Decide discount campaign on launch | May 13th | May 16th | Juan R. | 1.5h |
| startUS coordination tasks | May 14th | May 16th | Adrián C. | 2h |
| Review populate | May 16th | May 16th | Pablo R | 1h |
| Deployment | May 17th | May 17th | Adrián C. | 1.5h |
| PowerPoint | May 17th | May 19th | Rafael F | 3h |
| Rehearsal | May 19th | May 19th | Pablo R | 1h |



Week 2 (May 20th-May 24th)

| Task | Start Date | End Date | Team member | Time estimated |
|--|------------|----------|--------------------|-------------------|
| Meeting to discuss class feedback | May 20th | May 20th | All members | 1.5h |
| Improve advertisement spot | May 20th | May 22nd | Rafael F. | 2h |
| Improve user interface according to user feedback | May 20th | May 22nd | Daniel C. | 2h |
| Improve core use cases interaction according to user feedback | May 20th | May 22nd | Juan R. | 3h |
| startUS coordination tasks | May 21th | May 25th | Adrián C. | 2h |
| Deploy application | May 22nd | May 22nd | Adrián C | 1.5h |
| Test the deployed application | May 22nd | May 24th | Daniel C Juan R | 2h each |
| PowerPoint | May 21st | May 24th | Rafael F | 5h |
| Project launch retrospective documentation | May 22nd | May 24th | Pablo R | 5h |
| Rehearsal | May 26th | May 26th | Pablo R | 1.5h |

Piloting plan

The pilot users for our next iteration are the following:

- Francisco Rebollo, age 55.
- Javier Álvarez, age 19.
- Valentin Alexandre, age 19.
- Antonio Gámez, age 26.
- José Manuel Juan, age 21.
- Sandra Cantón, age 28.
- José Manuel Díaz, age 21.
- Rafael Cantón, age 55
- Antonio Carpio, age 54
- Mª Auxiliadora Lobo, age 50

Our piloting plan will consist of:

- Creating a user manual with implemented core functions about our application so that pilot
 users may know what actions they can do in it. This manual can contain pictures or links to
 videos to explain its use.
- Creating a test case suite for pilot users to execute it.



- Creating an environment where users can try our application and give them credentials to log in and try it.
- Creating a form in order to know users' opinions and get feedback to improve our product.
- Collect feedback from them, use it to improve our product and send them a new test case suit to receive new information.

Test case suite

Not logged user

- List and search public capsules
- Display public capsules
- Display terms of service.

User sign up

- Sign up as a new user
- Edit user notification mail and Twitter account
- Change the user password

Premium capsules

- Create a premium capsule
- Pay for the capsule
- Edit capsule
- Edit module
- Delete module
- Delete capsule

Important dates for our piloting plan in the future.

| Date | Description | Person in charge |
|--------------------|--|------------------|
| 04/05/19 -12/05/19 | Pilot users receive and fill last form | Adrián C. |
| 12/05/19 | Receive users feedback | Adrián C. |
| 13/05/19 | Planification using last feedback | All |

User form

User's feedback will be collected through the following survey: https://forms.gle/NjECqguaiS1hMcSW9

The survey has been written in Spanish, as it is the main language of all our pilot users. This survey also includes all the instructions necessary to test our system, as some pilot users said that they found confusing having the form and the user guide in different places. However, a manual will be provided in this deliverable so that software reviewers can test the system.

Credentials

Our pilot users will receive credentials, but they will be told to create a new user from scratch in order to test our signup form. These credentials will only be used in case they are unable to sign up to our system.