PROJECT SIMULATION THORUGH SCRUM AS A SCRUM MASTER

A project called “**Home slice**”.
The idea is:
- to create **an Airbnb-like service** for the long term, how sharing that property owners will be able to use to help them to find and manage tenants in cost-sharing arrangements.

The fund’s been raised, stakeholders are ready and I founded a small, collocated, self-managing, cross-functional Scrum team with **four developers** and a **Product Owner**.

The vision of the product is to make **home-sharing effortless**.

As per the Product Owner, who will be the stakeholder’s voice, the product includes two main groups:

- **People looking for homes;**
- **People looking for housemates;**

Also, the PO will carefully listen to their requirements and needs, expressed as User Stories.

Because of too many ideas, which come from stakeholders and which can produce **a huge unmanageable Product Backlog**, PO has to decide and take the consequences of the decision on **what to build and whatnot**, and in the end, he has to avoid the frustration of developers and making unhealthy situations in the Scrum team.

The PO collaborates with the team and the stakeholders to make the best decisions on what to make early or later (the most important stories are on the top and less important on the bottom). So, communication between all of them is **critical**.

For Backlog prioritization, we used the MoSCoW method. So, it means that we used a prioritization technique to reach a common understanding with stakeholders on the importance they place on the delivery of each requirement.

To make it more clear for the team members (if someone doesn't know), we wrote the whole meaning of the MoSCoW Method acronym:

Must (Mo) – The requirements that are critical and must be applied to a product as a matter of priority. Even if one of them is not taken into account, the release is considered to be unfulfilled.
Should (S) – Requirements important but not critical for the release. Such requirements are not very sensitive to time.
Could (Co) – Desirable but not mandatory requirements for your release. These are usually low-cost improvements for the product.
Would (W) – These are considered the least critical or may not correspond to the product strategy at all. They can be ignored and revised for future releases.

As a next step, we will put our vision on a board and after that, we will make a Story Roadmap with the Epics, User Stories, and MVPs. This process is completed **by PO, UX Expert, and Engineer guided by the Scrum Master.**

*Experts in some fields may be additionally engaged at the beginning of the project.

STORY MAPPING

THE PRODUCT VISION BOARD

VISION

Why are you creating the product?

To make home sharing effortless.

TARGET GROUP	**NEEDS**	**PRODUCT**	**BUSINESS GOALS**
Who is your target customer?	*What problem does your product solve?*	*What makes your product stand out?*	*How will the product benefit the company?*
Home Seeker: Millenials living in US metro areas. **Home Owner:** Empty nesters with homes in metro areas.	Easily find and manage share homes.	**Mobile App:** 1. Finding tenants & share homes: - Online Marketplace - Matching service - Appointment booking - Reviews 2. Managing share homes: - Create house rules - Share tasks - Set reminders - Split bills	Subscription based pricing charging home-owners. Free for tenants Tiered pricing e.g. - Silver - Gold - Platinum

STORY MAP

Find a Home		Book a Home		Stay in Home		
Search Homes	Visit Homes	Sign Lease	Make Initial Payment	Move in	Manage	Move Out
Filter By Location	Register on Site	View Lease Terms	View Payment Instructions	Schedule Move-in	View House Roles	Complete Room Inspection Report
Filter By Price	Contact Owner	Complete Lease	Pay by Credit Card	Complete Inspection Report	View Cleaning Roster	Schedule Inspection by Owner
View Property Profile	Book Appointment	Receive Co-signed Lease	View/Print/ E-mail Receipt		Set up bill splitting	Schedule Move Out
	Cancel or Change Appointment		Send Bond To Escrow		Set up auto pay for bills	Receive Bond From Escrow
MVP Release						
View Tenant Profiles	Get Appointment Reminder	Create Tenant profile	Pay by PayPal	Book Mover	Get task reminder	
Filter By Keywords					Chat With Other Tenants	

PRODUCT BACKLOG

The next step was to make a Product Backlog and to write User Stories and Acceptance Criteria which is done **by PO** and **supported** by **the team** as well. In this case, we fully created **only** 10 User Stories.

Id 1

Search by location

User story

As a home seeker I want to view properties near my desired location

Importance

How to test

- *Search by zipcode*
- *Search by suburb*
- *Search by city*
- *Search by current location*
- *View search results on a map view or list view*
- *Toggle between map view and list view*

Estimate

Id 2

Search by price

User story

As a home seeker I want to view properties that I can afford

Importance

How to test

- *Set min and max price range with increments of $50*
- *If no properties available, show properties in the next price range*

Estimate

Id 3

Property profile

User story

As a home seeker I want to view the necessary details of a property to decide if its the right one for me

Importance

How to test

Given that I'm interested in learning more about a property
When I click on a property card or map pin
Then I should be able to see the weekly rent, bond price, inspection times
And photographs of the property
And photographs of the owner with a contact me button nearby

Estimate

Id 4

Register on site

User story

As a home seeker I want to be able to register on the site to contact property owners

Importance

How to test

- Verify email address ownership
- Only allow 3 submissions from same IP address every 30 minutes
- Password must include 1 number and 1 special character
- Include Google Captcha

Estimate

Id 5

Contact owner

User story

As a home seeker I want to be able to contact property owners to ask questions, and request a viewing appointment

Importance

How to test

- On click of "contact me" button if user is not logged in, take user to registration/login page
- On click of "contact me" button if user is logged in, take user to contact form
- Contact form should include a "what is your enquiry about" checkbox with a dropdown, a free text field and a "send" button
- On click of "send", send form along with user contact details, to the property owner via email

Estimate

Id 6

Book appointment

User story

As a home seeker I want to be able to book an appointment to view a property

Importance

How to test

- Display earlier 2 available inspection times on property details page.
- On selection of an inspection time, if usr is not logged in, take user to registration/login page.
- On selection of an inspection time, if usre is logged in, take user to inspection booking form.

Estimate

Id 7

Cancel appointment

User story

As a home seeker I want to cancel or change an appointment if my plans change

Importance

How to test

- Allow both home seeker and home owner to cancel or change appointment at any time
- Send notification to other party of the cancellation or change

Estimate

Id 8

View lease terms

User story

As a home seeker I want to be able to understand lease terms so there no surprises after I sign the lease

Importance

How to test

- Download lease terms as pdf
- Print lease terms

Estimate

Id 9

Complete lease

User story

As a home owner I want to complete the lease application and sign it online and send it to the home owner to secure my desired property

Importance

How to test

- Save as draft when logged in
- Complete and sign lease when logged in
- Send signed lease to home owner
- Download and print signed lease

Estimate

Id 10

Get final lease

User story

As a home seeker I want to receive a copy of the co-signed lease for my records

Importance

How to test

- Receive notification when home owner co-signs lease
- Automatically save lease for retrieval at any time
- Download and print co-signed lease

Estimate

SPRINT PLANNING

The team has decided that 2 weeks is the length of a Sprint and the PO made a walk-through to explain to the team “Who, what & why” for each Story.

Because the team was planning the **first official Sprint**, they had to do **an initial estimation** for the entire backlog, which takes time.
So, we decided to put it into **Sprint 0**. During the initial estimation in this Sprint, the Scrum Master has been observing which stories have moved around the most.
These stories need to be further discussed because the team wasn’t sure where it belongs.

The Product Roadmap has been created, split into 3 releases, and the team had to make an **MVP in 9 months**. Also, the PO has to determine if these stories are correctly included in every release in the real world.

THE PRODUCT ROADMAP

DATE *The release date or time frame*	**1ST QUARTER**	**2ND QUARTER**	**3RD QUARTER**
NAME *The name of the new release*	Release 1	Release 2	MVP Release
GOAL *The reason for the new release*	**Acquisition**: Onboarding initial 100 home seekers for user testing “Find a Home” experience	**Acquisition**: User testing for “Book a Home” experience	**Activation**: User testing for “Full experience”
STORIES *The user stories that have to be completed*	1. Register on site 2. Filter by location 3. Filter by price 4. View property profile 5. View lease terms 6. Complete lease 7. View house rules 8. Contact owner	1. Book appointment 2. Cancel or change appointment 3. Receive co-signed lease 4. View payment instructions 5. Pay by credit card 6. View/print/email receipt 7. Send bond to escrow 8. Schedule move in	1. Complete inspection report 2. View cleaning roster 3. Set up bill splitting 4. Set up auto-pay for bills 5. Complete room inspection report 6. Schedule inspection by owner 7. Schedule move out 8. Receive bond from escrow
METRICS *The metrics to determine if the goal has been achieved*	100 registered users % registration completions % searches with owner contacted % lease completions Average # of profiles viewed per session	% sessions with appointment bookings % of canceled bookings % of changed appointments Daily active users Return users Net promoter score	1,000 active users by end of 3rd quarter % of tenants who complete inspection % of tenants who set up bill splitting % of tenants who set up auto-pay

During the Sprint Planning, which is time-boxed as Scrum Guide requires for 2-week Sprint, the goal for Sprint #1 has been defined between Developers and PO, and the Sprint Backlog as well.
The scope for Sprint #1 is negotiated without affecting the Sprint Goal and the **Definition of done** is created.

PRODUCT Home Slice	SPRINT NUMBER #1
GOAL To create a basic search experience for validation via user testing	
USER STORIES 1. Design search engine architecture 2. Set up data indexing 3. Search by location 4. Search by price 5. View property profile	

Often **some non-functional, technical requirements** would be driven by Developers, like in **this case (User Stories 1 and 2)**, that's why they must be involved in the Sprint Planning preparation.

The team has to work together to judge how many Stories and Story Points they can pick up in the first Sprint.

Story Points are given through Poker Planning and the Team did the Task Breakdown to make Tasks from Stories.
The velocity for the first Sprint has been estimated.

The act of estimating allows the team to discuss, plan and understand upcoming features they will work on. Estimations can give a customer an idea of when a feature will be available and it can help break work down and fit it into the next sprint. A record of this can inform a measure of the team's velocity (the amount of completed work the team is producing each sprint). Knowing the velocity can allow the team to create a release plan as well as identify productivity peaks and troughs.

When the team finished the Sprint Planning, we printed it and put it on the wall so that everyone can see in one place what's the Sprint Goal, Sprint Backlog, Velocity, Schedule, and Team Members.

Home Slice Team, Sprint #1

Sprint Goal

- Basic search experience for user testing

Sprint Backlog
- Design search engine architecture (3)
- Set up data indexing (5)
- Search by location (3)
- Search by price (3)
- View property profile (5)

Estimated Velocity: 21

Schedule
Sprint period: October 21 - November 4
Daily Scrum: 10:00am - 10:15am in Team Room
Sprint Review: November 4, 10:00am in the cafeteria

Team
Jason
Amy
Karthik
Isabella (50%)
Malik
Me (Scrum Master)

THE SPRINT

After the Sprint Planning and before the first Daily Scrum of Sprint #1, the Scrum Master has to take care of the Sprint Backlog and put it on the board and Kanban board or Jira if it's virtual.

During the Sprint, SM watched out carefully for what was happening with User Stories or Tasks, and how they progressed.

Scrum Master had to update the Burndown chart regularly because the SM is responsible for making sure that the team acts upon warning signs.
Some other metrics can also be used.

If the team is behind the schedule, some items from the Sprint Backlog will be removed. If they run out of the Sprint and the actual velocity is greater than the estimated velocity, they will pick up additional work.
Sometimes it's better to keep all unfinished tasks on the board because they will be discussed and reviewed later during the Sprint (Backlog Grooming for example) and put back into the Product Backlog.

When we speak about the Daily Scrum. It always happened in the same room, at the same time, right in front of the task board, participated only by Developers during which Developers communicated on questions:
- What they did do yesterday?
- What they will do today?
- Are there any impediments to their progress?

The only way SM might interfere with the Daily Scrum is if one team is skipping the DS or if they are not under the 15 min time-box.

Backlog Grooming

A couple of days before the end of the Sprint, **backlog items are discussed, reviewed, and prioritized by the product owner, and the rest of the team**. The primary goal of backlog grooming is to keep the backlog up-to-date and ensure that backlog items are prepared for upcoming sprints.

SPRINT REVIEW

During the Sprint Review, the increment has been demonstrated to the stakeholders, inspected and the Product Backlog was adopted.

The team and the stakeholders have transparently collaborated about what’s done in the Sprint.

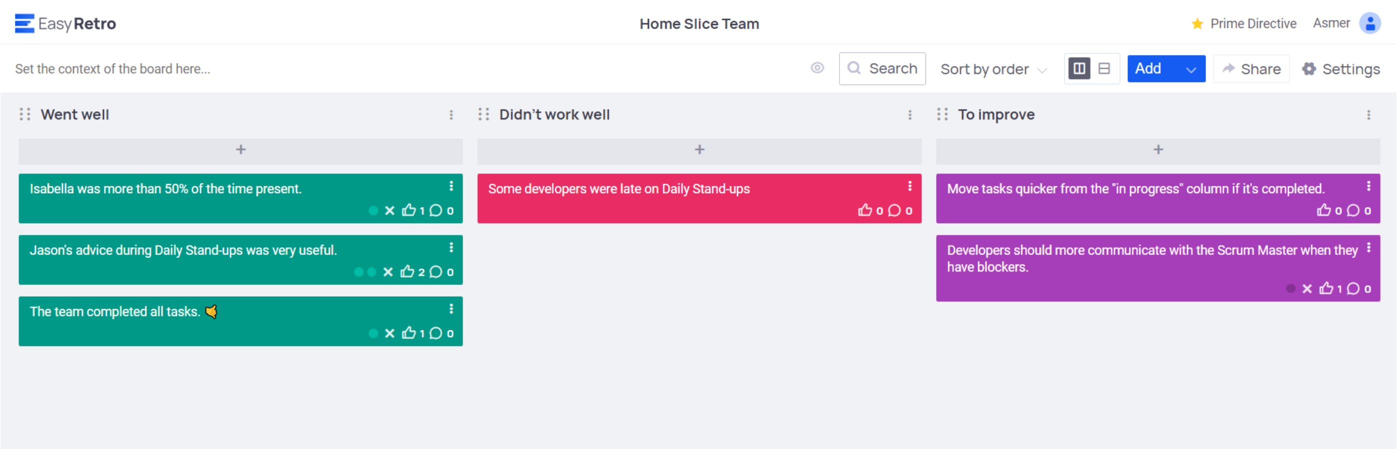
The stakeholders gave their feedback and ideas.

SPRINT RETROSPECTIVE

The team has reflected on the previous Sprint, the work that was done, and the achieved Goal, and generated ideas for improvement.

All Scrum Team members have attended the Sprint Retrospective.

The SM asked everyone to say what worked well, what didn’t and what should be done better as an improvement and we used an online tool (EasyRetro) to remove any obstacles and distractions for teams to have better meetings and improve as a whole.



At the end of the Sprint, the team completed all the tasks and stories and delivered a potentially shippable product increment.

Officially the Sprint has been closed.

*In this case there is no pending work but often there can be some unfinished work and it should be put back into the Product Backlog so that the PO can decide on whether to include it in the next sprint.