

Planning Poker was used to estimate sizes for tasks. It was used at a scrum meeting on Tuesday October 8. The process involved each group member placing the card they believed be represented the size of the task. If there was much disagreement, there was a discussion and then another hand was played until there was agreement.

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User Story #1: As Samuel Cote, an administrator, I require a personal login account so that I can manage my personal information.

- Conversations
  - What kind of personal information? -my personal information such as name, gender, office location(time zone), contact information, daily schedule, etc.
- Test Cases
  - Login with the admin account, and change the person information, check the information have successfully changed.
- Estimates: 5
- Priority: 1
  - Dubawnt: 1.
  - KF: high priority 1
- Justification: Django provides an administration section out-of-the-box, but it needs to be modified in order to allow administrators to change their personal information.

User Story #2:

As Samuel Cote, an administrator for the organization, I can log in securely to the server website, having more access privileges than any non-administrator so that I can rest assured that I have full control over the server.

- Conversations:
  - What sort of security arrangements would be made? - Basic: username, password. Administrator has more control than other uses.
- Test Cases
  - Use the admin account to login, check if the account have privileges to edit, delete, merge, and split entries.
- Estimates: 5
- Priority: 1
  - Dubawnt: 1
  - KF: high priority 1
- Justification: Django provides an administration section out-of-the-box, and it already gives the administrator full control over the server.

#### User Story #3:

As Samuel Cote, the program administrator, I would like to have a search box to search records from the server, so that I can easily find patient, doctor, or radiologist records.

- Conversations
  - Search the records by a specified key? (eg: name, address) -No, just search any record that contain the keyword
- Test Cases
  - Search a keyword, compare the result with the expected result.
- Estimates: 13
- Priority: 8
  - Dubawnt: 3
  - KF: medium priority 8
- Justification: The ability to search isn't essential because it will be possible to navigate without the search ability, but the function is important. Adding in a search function is difficult because we don't have any experience creating UI search functionality.

#### User Story #4:

As the administrator, I would like to have a table to display the search results on a web page, so that I can view the results easily.

- Conversations
  - Do you need to be able to sort the table? -Yes
- Test Cases
  - Search the database, check if the result would be able to display in a table correctly.
- Estimates: 8
- Priority: 3
  - Dubawnt: 3
  - KF: medium-high priority 3
  - LT: Can this be done without prioritizing User Story #3 higher as that is currently a lower priority than User Story #4?
- Justification: This is the same priority as the search functionality (User Story #3) since the two stories are linked, and the implementation of this User Story depend on the results of User Story #4.

#### User Story #5:

As Samuel Cote, the program administrator, I would like to sort entries in the search result table by individual attributes, so that I can find the desired records faster..

- Conversations
  - Do you need to sort in ascending or descending order? -both
  - Do you need a button or just click on the table header to sort? -click on the header.
- Test Cases
  - Sort the table by one column, check the result is sorted or not.
- Estimates: 8
- Priority: 13
  - Dubawnt:5
  - KF: medium-low priority 13
- Justification: This is an extension to User Story #4 and will require a whole bunch of extra UI functionality.

#### User Story #6:

As the administrator, I would like to have an edit button beside each entry of the search result table, so that I can modify each entry as needed.

- Conversations
  - Do you think a link on the name of each entry is better than a button? -No [KF: either way is fine - link or button]
- Test Case
  - Click on the edit button, check if it can link to the editing page.
- Estimates: 3
- Priority: 3
  - Dubawnt: 5
  - KF: medium-high priority 3
- Justification: This is an UI extension to the administration page and would thus not be too difficult to create.

#### User Story #7:

As Doctor Hadley, I require a personal login account so that I can manage my personal information.

- Conversations
  - What kind of personal information? -my personal information such as name, gender, office location, password, etc.
- Test Case
  - Use a Doctor account to login, check if it can enter the Doctor's home page.
- Estimates: 8
- Priority: 1
  - Dubawnt: 2
  - KF: high priority 1
    - KF: other important user stories for administrator: - these are all of high priority 1
    - #6a: administrator must be able to create new and disable outdated field workers.
    - #6b: administrator must be able to create new and disable outdated doctors
- Justification: This is like giving the administrator the ability to edit their personal information, but will require more work since there already is an administrator infrastructure, but there is no such infrastructure for doctors.

#### User Story #8:

As Doctor Hadley, I can view patient scans submitted by field workers so that I can check for and diagnose problems.

- Conversations
  - Doctors stationed in a nearby clinic look at the ultrasound scans, and return annotated copies with additional instructions to the field workers.
- Test Cases
  - Added one picture, check the picture is displayed correctly.
  - Added three pictures, check the pictures displayed correctly.
- Estimates: 13
- Priority: 3
  - Dubawnt: 3
  - KF: high priority 1
- Justification: This is mostly an UI component and will require much work to interface with a secure picture hosting website and to display the pictures properly.

#### User Story #9:

As Doctor Hadley, a zoom function is required on the images, so that I can make a precise analysis of the patient's situation.

- Conversations
  - How to access the Zoom-In function? set a button beside the image.
- Test Cases
  - Open one Image and apply the zoom-in function, then check if it works correctly.
- Estimates: 13,
- Priority: 8
  - Dubawnt: 8
  - KF: medium priority 8
- Justification: This is an UI Component that isn't really essential and could prove quite difficult because it will require finding or perhaps even creating a widget for image editing.

#### User Story #10:

As Doctor Hadley, I can add the annotations to patient images and scans submitted by field workers so that I can provide the patient and worker with instructions.

- Conversations
  - What will the tool look like? a pen used to make notes such as drawing circles or arrows on the image, and an eraser is also required.
- Test Cases
  - Add an annotation to a picture, and save it. Check if the picture correctly annotated.
- Estimates: 20
- Priority: 13
  - Dubawnt: 13
  - KF: medium-low priority 13
- Justification: This is linked to User Story 8, and requires that there be scans available to annotate. Implementing this system would require both extensive database effort and extensive UI effort.

#### User Story #11:

As Doctor Hadley, I would like to be able to add comments under the patient's case, so that patients can get their updated medical history.

- Conversations
  - What kind of comment will be added? any specific format? -It is similar to patient's medical history, it is written in complete or nearly complete sentences.
- Test Cases
  - Add one comment to the patient's case, check the comment is correctly added.
  - Add three comments to the patient's case, check the comments are correctly added.
- Estimates: 5
- Priority: 1
  - Dubawnt: 5
  - KF: high priority 1
- Justification: This is an integral part of the Ultra-Remote-Medicine process. It shouldn't prove to be particularly difficult.

#### User Story #12:

As Doctor Hadley, I would like to be able to add sub comment to a patient's case, so that I can update the patient's current condition.

- Conversations
  - Do need something like Web Blog? -Yes, kind of. But the doctors can not change the previous comment.
- Test Cases
  - Add one sub comment, check the sub comment is added correctly.
  - Add three sub comments, check the three sub comments are added correctly.
- Estimates: 3
- Priority: 2
  - Dubawnt: 5
  - KF: high priority 2
- Justification: This is an extension of the User Story #11 and shouldn't be too difficult, since its a mere matter of adding another table to the database and a simple query can be used to link sub-comments to the original comment they are associated with.

#### User Story #13:

As Doctor Hadley, I would like to have a link to my profile associated with the comments and annotations that I make regarding the patient, so that there will be a record of who has viewed the case and a reference back to myself.

- Conversations
  - Do you mean you want the other doctor knows the annotations is made by you? - Yes
- Test Cases
  - Add one comment, check the link is correctly linked to the Doctor.
  - Add two comments, check the links are correctly linked to the corresponding Doctor.
- Estimates: 3
- Priority: 3
  - Dubawnt: 8
  - KF: medium-high priority 3
- Justification: This should prove to be quite easy and quick to implement because it's simply a matter of adding a link. This is a simple extension to User Story #11.

#### User Story #14:

As Doctor Hadley, I would like to have the ability to edit the priority of a patient's situation, so that patients in more dangerous situations will not miss the ideal time for treatment.

- Conversations
  - How do you solve the problem that some patients are on the same level of dangerous situation? First come first serve.
- Test Cases
  - Change the priority of one patient, check the patient is in the correctly position of the waiting queue.
  - Change the priority of two patients, check the patients are in the correctly position of the waiting queue.
- Estimates: 8
- Priority: 5
  - Dubawnt: 8
  - KF: medium priority 5
- Justification: This will be a mid-sized task since it is an UI extension of the doctor page and involves adding an extra column on the database table.

#### User Story #15:

As Doctor Hadley, I would like to have a search bar on my home page, so that I can retrieve patient information immediately.

- Conversations
  - Where will be the searching bar located on the web page? -the top of the web page.
- Test Cases
  - Search one keyword, check the result is successfully display all the patients which have that keyword.
- Estimates: 8
- Priority: 8
  - Dubawnt: 5
  - KF: medium priority 8
- Justification: This not essential since it will be possible to navigate without such a bar. Since it would reuse most of the functionality of User Story #3, this is essentially an UI problem and is thus a mid-sized task.

#### User Story #16:

As Doctor Hadley, I would like to link two patients, so that I can merge the duplicated records.

- Conversion
  - It can be detected by the system, but you can have this feature in case the system failure. -sure
- Test Cases
  - Click on the "Help Button", check if other Doctors can the case.
- Estimates: 8
- Priority: 20
  - Dubawnt: 20
  - KF: low priority 20
  - KF: this should not be done by the doctor, but the manager. However it would be good if a doctor could flag such cases.
- Justification: It is not an essential function of the system, would involve working with the database and some UI work.



#### User Story #17:

As Doctor Hadley, I would like to search for cases involving the specified organ system, so that I could view cases from patients that are relevant to my specialties.

- Conversations
  - What are the types of organ system? I will provide a list to you later.
  - How to display these options? By providing a checkbox for each organ system.
- Test Cases
  - Select one type of organ system and search it, check the result is correctly displayed.
  - Select three types of organ system and search them, check the result is correctly displayed.
- Estimates: 3
- Priority: 8
  - Dubawnt: 3
  - KF: medium priority 8
- Justification: This is quite important since it will save the doctor large quantities of time as opposed to searching manually to find cases relevant to them. Its not particularly hard to filter results this way.

#### User Story #18:

As Doctor Hadley, I would like to add a “Help Button” on the patient’s case page, so that I can consult with my colleagues when I am uncertain about how to diagnose and treat my patient’s problem.

- Conversion
  - “Help Button”, Do you mean once you click this button then you allow the other doctor to add comment on that case? -Yes
  - But you still hold the case on your profile? -Yes
- Test Cases
  - Click on the “Help Button”; check if other Doctors can view the case.
- Estimates: 13
- Priority: 20
  - Dubawnt:20
  - KF: low priority 20
- Justification: It is not really important functionality, and would involve making UI and database changes in order to accommodate this ability.

#### User Story #19:

As a field worker, I can communicate with the server to create a new patient file, since it is through field workers that most new patients are found.

- Conversations
  - What about the patient exists in the system? -directly open the patient's page, but not create new entry.
- Test Case
  - Add one new patient, check the patient has been correctly added.
  - Add one existing patient, check no new entry will be created.
- Estimates: 13
- Priority: 1
  - Dubawnt: 1
  - KF: high priority 1
- Justification: This functionality is essential which is why it has such high priority. It will involve changes to the UI and working with the database to create the new record.

#### User Story #20:

As a field worker, I can upload patient scans and information to the website via the cellphone infrastructure (SMS/MMS), since internet access in Nepal is not widespread enough in rural areas.

- Conversations:
  - In their pitch, they discussed how teams might have to hike to the top of hills in order to communicate at all.
- Test Cases
  - Send one picture to the server, check the picture is successfully and correctly added.
  - Send three pictures to the server, check the pictures are successfully and correctly added.
- Estimates: 20
- Priority: 2
  - Dubawnt: 2
  - KF: high priority 2
- Justification: We don't have experience developing with SMS/MMS, but it is an important function in the target area, where there is a lack of internet access. This would likely prove difficult and time consuming due to its unfamiliarity.

#### User Story #21:

As a field worker, I require a personal login account so that I can manage my personal information.

- Conversations
  - What kind of personal information? -my personal information such as name, gender, office location, contact information, a list of patients that I have met or I am going to meet.
- Test Cases
  - Create a new account for a field worker, and check the account is added correctly.
- Estimates: 5
- Priority: 1
  - Dubawnt: 1
  - KF: high priority 1
- Justification: This and User Story #7 would use mostly the same infrastructure. This is very important, since it is a fundamental function for field workers.

#### User Story #22:

As a field worker, I can assign the priority for the patients, so that I can set the urgent case to be viewed by the doctor first .

- Conversations
  - How can you order the urgent case if the system has many emergency? -first come first serve.
- Test Cases
  - Set one patient to urgent when the system has no other urgent case, check the patient's prioritize is first in the system
  - Set one patient to urgent when the system has some other urgent cases, check the patient's prioritize is in the right position.
- Estimates: 8
- Priority: 3
  - Dubawnt: 5
  - KF: medium-high priority 3
- Justification: This feature is important but not a priority. It is an extension functionality to the system. It is possible to modify the priority value on the database table but it will increase the complexity of the search, filter and sort functionality.

#### User Story #23:

As a field worker, I can download patient records onto my android phone, so that I can access patient information even when I'm in a remote area.

- Conversations
  - Which Android system version do you have? -I don't know
- Test Case
  - Download one patient, check the correctness of the patient
  - Download three patients, check the correctness of the three patients
- Estimates: 20
- Priority: 13
  - Dubawnt: 13
  - KF: medium priority 8
  - LT: Or medium-low priority 13
- Justification: This would prove difficult and time consuming since we don't have any experience in creating a mobile application. It is not very essential feature on our project.

#### User Story #24:

As a field worker, I would like to have the privilege to add comments to a patient's case page, so that doctor would have more information about the patient's current condition.

- Conversation
  - What would be the comment added by a field worker? Physical finding on patient's image during the first meeting, and the problem mentioned by patient.
  - Any way to recognize the difference between doctor's comment and field worker's comment? we can have different colour to indicate doctor's comment or field work's comment.
- Test Cases
  - Add one comment to the case page, check the comment is correctly added and coloured.
- Estimates: 5
- Priority: 2
  - Dubawnt: 5
  - KF: high priority 2
- Justification: This is also an integral part of the Ultra-Remote-Medicine process. It shouldn't prove to be particularly difficult.

#### User Story #25:

As a concerned citizen, I can get contact information off of the website so that I can get in touch with the organization.

- Conversations
  - They'd like a login page and other public material for the website including:
    - A map showing what areas they've been helping
    - Contact information.
- Test Case
  - Add a sample contact information, check if it could be displayed normally.
- Estimates: 2
- Priority: 20
  - Dubawnt: 20
  - KF: low priority 20
- Justification: It would be easy to implement since it is a basic webpage design task, and it is an optional feature according to the Product Champions.

#### User Story #26:

As a concerned citizen, I can see a map showing the regions that the team has been helping so that I can see what my donations and effort are helping to achieve.

- Conversations
  - What kind of information would be on the page?
    - A map showing what areas they've been helping
    - Contact information
- Test Case
  - Add information on the homepage, and check if it could be displayed correctly.
- Estimates: 13
- Priority: 20
  - Dubawnt: 20
  - KF: low priority 20
- Justification: It would be difficult and time-consuming to implement this feature, because it requires integration with google maps. It is also an optional feature according to the Product Champions.