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Hidden Agency



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SymCheck

Sprint 6 Presentation

Team 5



Alan Singleton

Agenda



Project Recap

- What is SymCheck
- Technologies being used



Sprint 5 Recap

- Completed Tasks and Stories
- Screenshot of new features



Sprint 6

- Committed, Completed, and Uncompleted Tasks and Stories
- Burndown Chart
- Deliverables
- Acceptance Criteria
- Test Case



Project Timeline

- Sprint 7 and 8 Backlog



Retrospective



Conclusion

Project Recap

What is SYM✓?

- An image-based, self-diagnosis web application
- A patient's uploaded image analyzed by an original algorithm
 - This algorithm is developed, tested, and ran using TensorFlow's Keras library
- SymCheck diagnoses 2 illnesses: chickenpox (varicella) and pink eye (conjunctivitis)
- The use of SymCheck could thus also help in mediating the spread of COVID-19 by reducing the traffic in Urgent Care facilities.
- Does not require account creation or login, nor answering a long series of monotonous questions (image-based)

Technologies used in SymCheck

 Frontend	 Web Framework	 Backend
 Google Maps Integrated Map API		 Dialogflow AI-based Chatbot
 TensorFlow Machine Learning Library	?	 Keras Machine Learning API

Sprint 5 Recap

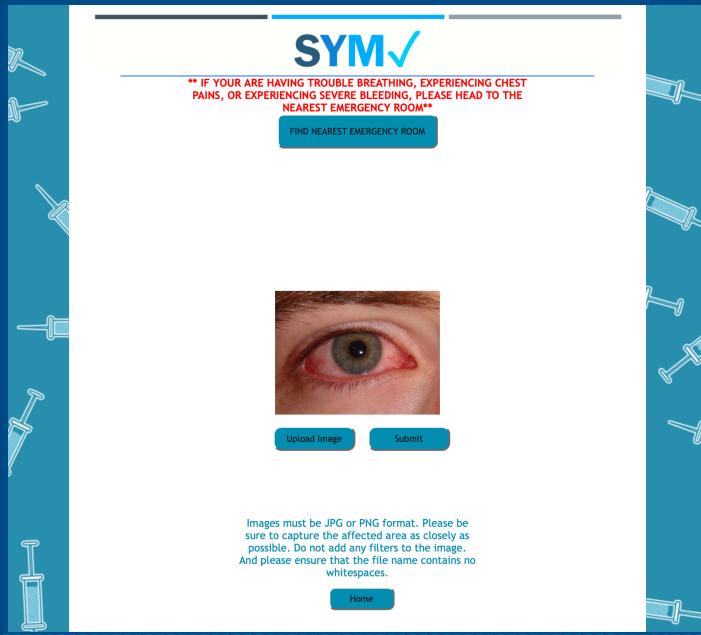
Sprint 5 Deliverables

T	Key	Summary	Story Points	Labels	P ↓
<input checked="" type="checkbox"/>	HID-62	As a patient, I want to access the SymCheck application on the web so that I don't have to download and run an instance myself	8	CloudAccess	
<input checked="" type="checkbox"/>	HID-58	As a patient, I want to interact with the SymCheck Chat Bot so that I could have my questions answered quickly	5	AllPages	
<input checked="" type="checkbox"/>	HID-56	Find more images of Chickenpox, PinkEye, Normal skin and Normal eye for the ML algorithm		None	
<input checked="" type="checkbox"/>	HID-57	As a patient, I want to see the image I uploaded so that I know I chose the intended file	1	ImageUploadPage	
<input checked="" type="checkbox"/>	HID-74	Find a coding collaboration tool for easier integration and editing of SymCheck		None	
<input checked="" type="checkbox"/>	HID-65	Create questions for textual diagnosis and weight priority		None	
<input checked="" type="checkbox"/>	HID-63	Enhance the SymCheck application by cleaning up code		None	
<input checked="" type="checkbox"/>	HID-61	Redo all stories, test cases, and acceptance criteria's to reflect proper type of user and verbiage		None	
<input checked="" type="checkbox"/>	HID-60	Link all user stories, test cases, and acceptance criteria together		None	
<input checked="" type="checkbox"/>	HID-66	Create a presentation for Sprint 5		None	
<input checked="" type="checkbox"/>	HID-68	Create a presentation for Sprint 5		None	
<input checked="" type="checkbox"/>	HID-70	Link all user stories, test cases, and acceptance criteria together		None	

- We added a new capability that allows you to see the image uploaded for confirmation purposes.
- We added a chatbot to each page that acts as a virtual assistant for SymCheck.
 - It can direct users to various resources such as our GitHub, the CDC website, or reach us via email
- We hosted our application to the cloud for easier accessibility.
 - Users can access SymCheck on any laptop or desktop
 - There is no need to install and run SymCheck on your device

Sprint 5 Screenshots

New Image Page Capability



Chatbot Capability



Sprint 6

Sprint 6 Committed Tasks and Stories

T	Key	Summary	Story Points	P
<input checked="" type="checkbox"/>	HID-59	As a patient, I want to include other symptoms along with my image upload so that I can receive a better diagnosis of my illness	5	↑
<input checked="" type="checkbox"/>	HID-84	Find 200 images of ringworm		↑
<input checked="" type="checkbox"/>	HID-73	Develop a python script to clear media folder OR implement a database for uploaded pictures		↑
<input checked="" type="checkbox"/>	HID-86	HID-81 / Come up with FAQ		↑
<input checked="" type="checkbox"/>	HID-85	Create Mock-ups for new SymCheck Design		↑
<input checked="" type="checkbox"/>	HID-81	As a patient, I want to access a FAQ page so that I can see answers to common questions that I may have	1	↓
<input checked="" type="checkbox"/>	HID-77	Update GitHub wiki		↓
<input checked="" type="checkbox"/>	HID-76	Update Technical Paper		↓
<input checked="" type="checkbox"/>	HID-75	Update installation guide and user manual		↓
<input checked="" type="checkbox"/>	HID-70	Create a presentation for Sprint 6		↓

Metrics

- 2 User Stories
- 6 Story Points
- 7 Tasks
- 1 Subtask

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Sprint 6 Completed Tasks and Stories

T	Key	Summary	Story Points	P
<input checked="" type="checkbox"/>	HID-84	Find 200 images of ringworm		↑ ...
<input checked="" type="checkbox"/>	HID-85	Create Mock-ups for new SymCheck Design		↑
<input checked="" type="checkbox"/>	HID-81	As a patient, I want to access a FAQ page so that I can see answers to common questions that I may have	1	↓
<input checked="" type="checkbox"/>	HID-77	Update GitHub wiki		↓
<input checked="" type="checkbox"/>	HID-76	Update Technical Paper		↓
<input checked="" type="checkbox"/>	HID-75	Update installation guide and user manual		↓
<input checked="" type="checkbox"/>	HID-70	Create a presentation for Sprint 6		↓

Metrics

- 1 User Story
- 1 Story Point
- 6 Tasks

Sprint 6 Uncompleted Tasks and Stories

Key	Summary	Issue Type	Priority	Status	Story Points (5)
HID-59	As a patient, I want to include other symptoms along with my image upload so that I can receive a better diagnosis of my illness	Story	↑ Highest	IN PROGRESS	5
HID-73	Develop a python script to clear media folder OR implement a database for uploaded pictures	Task	↑ High	IN PROGRESS	-

What went wrong

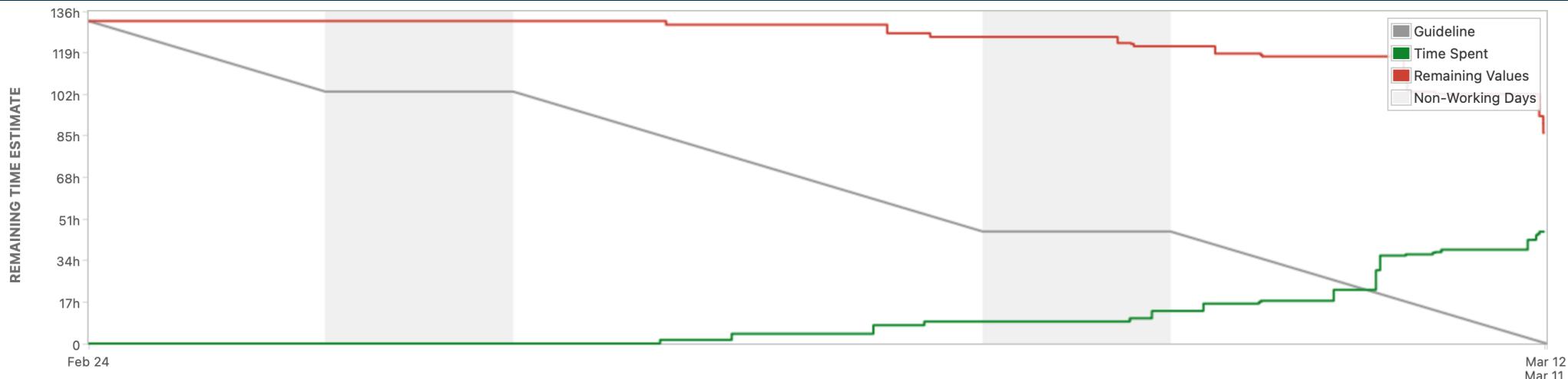
Repl.it

- No longer supports large installation
- Tensorflow cannot be downloaded

Advance Prediction Page

- Unable to perform real-time collaborative programming due to Repl.it failure
- Backend logic still needs work

Sprint 6 Burndown Chart



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Hidden Agility

Sprint 6 Deliverables

Sprint 6 Deliverable: FAQ Page

Top of Page

Bottom of Page

FAQ Content (Top and Bottom)

Top of Page Questions:

- Q.** What diseases does SymCheck diagnose?
A. At this current stage in SymCheck's development, the SymCheck can detect chickenpox and pinkeye through photo recognition, but is looking to expand this in the future.
- Q.** How does my advanced diagnosis question responses attribute to my confidence level?
A. By answering the questions on our advanced diagnosis page, your confidence level could either increase or decrease depending on your response, to give a more accurate diagnosis.
- Q.** What is the best way to reach the developers?
A. If you would like to leave feedback, comments or concerns you can email our team at symcheckapp@gmail.com. You can find the link to email us at the bottom of the page.

Bottom of Page Questions:

- Q.** What is the best way to reach the developers?
A. If you would like to leave feedback, comments or concerns you can email our team at symcheckapp@gmail.com. You can find the link to email us at the bottom of the page.
- Q.** What is the best photo format to upload?
A. When uploading your photo, be sure that it is saved as JPG or PNG. For best results, capture the area of concern as closely and clearly as possible. Do not add filters or edit the photo.

Feedback Section:

FIND NEAREST EMERGENCY ROOM

Feedback
Contact us [Here](#) for any questions or comments for our team

Sprint 6 Deliverable: New SymCheck Design

The screenshot shows the homepage of the SymCheck app. At the top, there's a navigation bar with links for Home, Upload, Contact Us, FAQ, and About Us. The main visual features two large, overlapping blue circles. The left circle contains the text "Illness Image Recognition at its Finest" and a brief welcome message about the app's accuracy and purpose. It has two buttons: "CHECK OUT A QUICK DEMO" and "UPLOAD IMAGE". The right circle contains a photo of a doctor with a stethoscope, overlaid with the text "Going to add slides of images". Below these circles is a "Contact Us" section with email and social media links. The footer includes a copyright notice, terms of service, privacy policy, and social media icons for Twitter, Instagram, and Facebook.

SYM✓

Home Upload Contact Us FAQ About Us

Illness Image Recognition at its Finest

Welcome to SymCheck, an illness diagnosis app that can help you identify your problems with an image of the effected area! Our algorithm is 78% accurate and will be able to give advice on how best to handle your illness!

CHECK OUT A QUICK DEMO

UPLOAD IMAGE

SYMCHECK RESOURCES SUPPORT

Home Django FAQ

Upload TensorFlow

Contact Us Keras

About Us Repl.it Google Map API

Email: symcheckapp@gmail.com
Facebook: [facebooklink](#)
Instagram: [@instagramlink](#)
Twitter: [Twitterlink](#)

*This application is not run nor affiliated with any hospitals, urgent care, or doctors offices for official consultation contact your local physician or hospital.

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Twitter Instagram Facebook

Homepage

Sprint 6 Deliverable: New SymCheck Design

The screenshot shows the upload page of the SymCheck application. At the top, there is a navigation bar with links to Home, Upload, Contact Us, FAQ, and About Us. Below the navigation bar is a warning message: ****IF YOUR ARE HAVING TROUBLE BREATHING, HAVE CHEST PAINS, OR SEVERE BLEEDING, PLEASE HEAD TO THE NEAREST EMERGENCY ROOM****. A blue button labeled **NEAREST EMERGENCY ROOM** is positioned above a placeholder image area. The placeholder image shows a stylized sun and clouds. To the left of the image, there is a callout bubble with instructions: **Images must be JPG or PNG format. Please be sure to capture the illness area as close as possible. Do not add any filters to the image. Please make sure the file name contains no whitespaces.**. Below the image are two buttons: **UPLOAD IMAGE** and **SUBMIT**. To the right of the image is a blue speech bubble icon. At the bottom of the page, there are three sections: **SYMCHECK**, **RESOURCES**, and **SUPPORT**. The **SYMCHECK** section lists: Home, Upload, Contact Us, About Us. The **RESOURCES** section lists: Django, TensorFlow, Keras, Repl.it, Google Map API. The **SUPPORT** section lists: FAQ. On the right side, there is a **Contact Us** section with links to Email, Facebook, Instagram, and Twitter. At the very bottom, there is a note: ***This application is not run nor affiliated with any hospitals, urgent care, or doctors offices for official consultation contact your local physician or hospital.** and social media icons for Twitter, Instagram, and Facebook. The footer also includes a copyright notice: © 2020 - symcheck.jazzymaya.repl.co, Terms of Service, Privacy Policy, and a logo with the letter S.

Upload Page

Sprint 6 Deliverable: New SymCheck Design

The screenshot shows the user interface of the SymCheck application. At the top, there is a navigation bar with links for Home, Upload, Contact Us, FAQ, and About Us. Below the navigation bar is a warning message: ****IF YOUR ARE HAVING TROUBLE BREATHING, HAVE CHEST PAINS, OR SEVERE BLEEDING, PLEASE HEAD TO THE NEAREST EMERGENCY ROOM****. A prominent blue button labeled **NEAREST EMERGENCY ROOM** is centered below the warning. Below this, there is a **SKIP TO RESULTS** button. The main form consists of several questions with radio button options:

- Do you have a fever? (above 98.6 F or 37 C)
 Yes No
- Have you ever had the Chicken pox?
 Yes No
- Have you ever had Chicken pox before 6 months?
 Yes No
- Are you experiencing any irritation in the affected area (Burning, itching, or tightness)?
 Yes No

At the bottom of the form are two buttons: a large blue **SUBMIT** button and a smaller blue button with a speech bubble icon.

SYMCHECK **RESOURCES** **SUPPORT**

SYMCHECK	RESOURCES	SUPPORT
Home	Django	FAQ
Upload	TensorFlow	
Contact Us	Keras	
About Us	Repl.it	
	Google Map API	

Contact Us

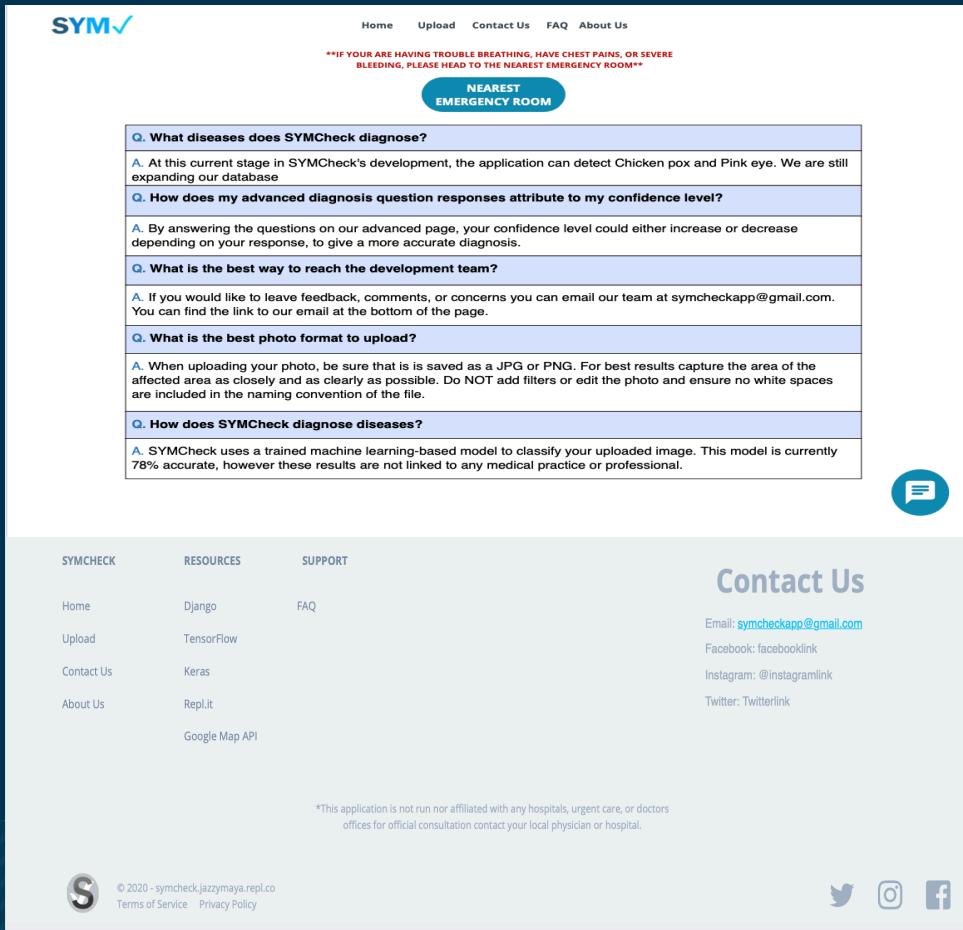
Email: symcheckapp@gmail.com
Facebook: [facebooklink](#)
Instagram: [@Instagramlink](#)
Twitter: [Twitterlink](#)

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Advance Prediction Page

Sprint 6 Deliverable: New SymCheck Design



The screenshot shows the SymCheck FAQ page. At the top, there is a navigation bar with links to Home, Upload, Contact Us, FAQ, and About Us. Below the navigation bar is a red warning message: "IF YOU ARE HAVING TROUBLE BREATHING, HAVE CHEST PAINS, OR SEVERE BLEEDING, PLEASE HEAD TO THE NEAREST EMERGENCY ROOM". A blue button labeled "NEAREST EMERGENCY ROOM" is present. The main content area contains several questions and answers:

- Q. What diseases does SYMCheck diagnose?**
A. At this current stage in SYMCheck's development, the application can detect Chicken pox and Pink eye. We are still expanding our database.
- Q. How does my advanced diagnosis question responses attribute to my confidence level?**
A. By answering the questions on our advanced page, your confidence level could either increase or decrease depending on your response, to give a more accurate diagnosis.
- Q. What is the best way to reach the development team?**
A. If you would like to leave feedback, comments, or concerns you can email our team at symcheckapp@gmail.com. You can find the link to our email at the bottom of the page.
- Q. What is the best photo format to upload?**
A. When uploading your photo, be sure that it is saved as a JPG or PNG. For best results capture the area of the affected area as closely and as clearly as possible. Do NOT add filters or edit the photo and ensure no white spaces are included in the naming convention of the file.
- Q. How does SYMCheck diagnose diseases?**
A. SYMCheck uses a trained machine learning-based model to classify your uploaded image. This model is currently 78% accurate, however these results are not linked to any medical practice or professional.

Below the FAQ section, there is a "Contact Us" form with fields for Name, Email, and Message, along with a CAPTCHA field. At the bottom of the page, there is a footer with links to SYMCheck, Resources, and Support, as well as social media links for Twitter, Instagram, and Facebook. A copyright notice and terms of service are also present.

FAQ Page

Sprint 6 Deliverable: New SymCheck Design

SYM✓

[Home](#) [Upload](#) [Contact Us](#) [FAQ](#) [About Us](#)

What is SYMCheck!

Welcome to SymCheck, an online image diagnosis application that will help you identify what illness you may have. Our site and algorithm, made with Django and tensorflow, has an accuracy of over 78% and can help you make an informed decision on if or when you may need a medical professional.

MEET THE TEAM !

Morgan Franklin: Cloud Engineer

Morgan as our Cloud Engineer ensured that our public site is up and monitoring its activity as well as its database. She has also done an amazing job with technical documentation concerning the application.



Jasmine Washington: Scrum Master/Project Manager

Jasmine as both our Project Manager and Scrum master kept everyone on task, checked in on all of us daily, and even assisted others with their work load. She is has amazing leadership skills that would put anyone to shame!



Sayema Islam: Product owner/Developer

Sayema Islam as our product owner came up with this brilliant idea that would help out many people during this crises in an effort to minimize exposur! She has also been organizing any code and writing all technical documents

Swapnil Kadekar: Machine learning Engineer

Swapnil Kadekar as our Machine learning engineer designed and implemented an amazing algorithm using Tensorflow, Keras, and python



Briana Figueroa: Front-end Developer/Designer

Briana Figueroa as our front-end developer developed several of our pages as well as making them reactive for mobile users with HTML, CSS, and JavaScript. She also as our designer she created our page layout as well as the artwork.



About Us Page

Alan Singleton: Full-Stack Developer

Alan Singleton as our Full-stack developer, implemented several of the pages HTML, CSS, and JavaScript. He has also set up the backend of our application to implement the results of our algorithm with python.



SYMCHECK	RESOURCES	SUPPORT
Home	Django	FAQ
Upload	TensorFlow	
Contact Us	Keras	
About Us	Repl.it	
	Google Map API	

Contact Us

Email: symcheckapp@gmail.com

Facebook: [facebooklink](#)

Instagram: [@instagramlink](#)

Twitter: [Twitterlink](#)

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Acceptance Criteria and Test Case

Acceptance Criteria

Key	Summary	Label
HID-81	<ol style="list-style-type: none">Given that the patient is on any page, when the patient clicks the FAQ button, then the patient should access the FAQ pageGiven that the patient is on the FAQ page, when the patient clicks the Home button, then the patient is returned to the HomepageGiven that the patient is on the FAQ page, when the patient clicks on the New Diagnosis button, then the patient is rerouted to the ImageUpload pageGiven that the patient is on the FAQ page, when the patient clicks the Find Nearest Emergency Room button, then the patient will see the nearest ERs and interact with the mapGiven that the patient is on the FAQ page, when the patient clicks the send feedback link, then the application will open the patient's default mail app with the email section prefilled to send to symcheckapp@gmail.com	FAQ Page

Test Cases

Test Case For	Key	Test Cases	Test Data	Expected Results	Actual Results	Pass/Fail
FAQPage	HID-81	Questions and Answers		Patient can see listed questions and respective answers	Patient sees listed questions and respective answers	P
FAQPage	HID-81	Return to Home		Patient can return to the homepage	Patient is returned to the homepage	P
FAQPage	HID-81	New Diagnosis		Patient can access the image upload page	Patient is rerouted to the image upload page	P
FAQPage	HID-81	Find Nearest ER		Patient can access the interactive map with nearest ERs shown	Patient can use the emergency ER feature	P
FAQPage	HID-81	Feedback	"Test"	Patient can send feedback via email to SymCheck developers	Patient can send an email to symcheckapp@gmail.com	P

Project Timeline

Sprint 7 (March 16 - April 5)

<input type="checkbox"/> As a patient, I want to include other symptoms along with my image upload so that I can receive a better diagnosis of my illness	SymCheck	sk	HID-59	↑	5
<input checked="" type="checkbox"/> Redo SymCheck's application design		BF	HID-83	↑	
<input type="checkbox"/> As a patient, I want to access other pages on the site with a navigation bar so that I can easily move from page to page	SymCheck	MF	HID-82	↑	3
<input type="checkbox"/> As a patient, I want to access an About Us page so that I can get to know more about the SymCheck creators	SymCheck	BF	HID-93	↑	1
<input type="checkbox"/> As a patient, I want to know which illnesses SymCheck can diagnose so that I know what I can upload.	SymCheck	SI	HID-79	↓	1
<input checked="" type="checkbox"/> Add a disclaimer at the bottom of each page		BF	HID-80	↓	
<input checked="" type="checkbox"/> Create a presentation for Sprint 7		JW	HID-71	↓	



Sprint 8 (April 6 - April 27)

<input checked="" type="checkbox"/> As a patient, I want to access the SymCheck application on the web so that I don't have to download and run an instance myself	SymCheck	JW	HID-62	↑	8
<input checked="" type="checkbox"/> As a patient, I want to access SymCheck on my mobile device for convenience	SymCheck	AS	HID-64	↑	5
<input checked="" type="checkbox"/> Add ringworm as another illness that can be predicted		SK	HID-78	↑	
<input checked="" type="checkbox"/> Develop a python script to clear media folder OR implement a database for uploaded pictures		BF	HID-73	↑	
<input checked="" type="checkbox"/> Set up AWS environment for development and production		MF	HID-88	↑	
<input checked="" type="checkbox"/> Create a presentation for Sprint 8		JW	HID-72	↓	

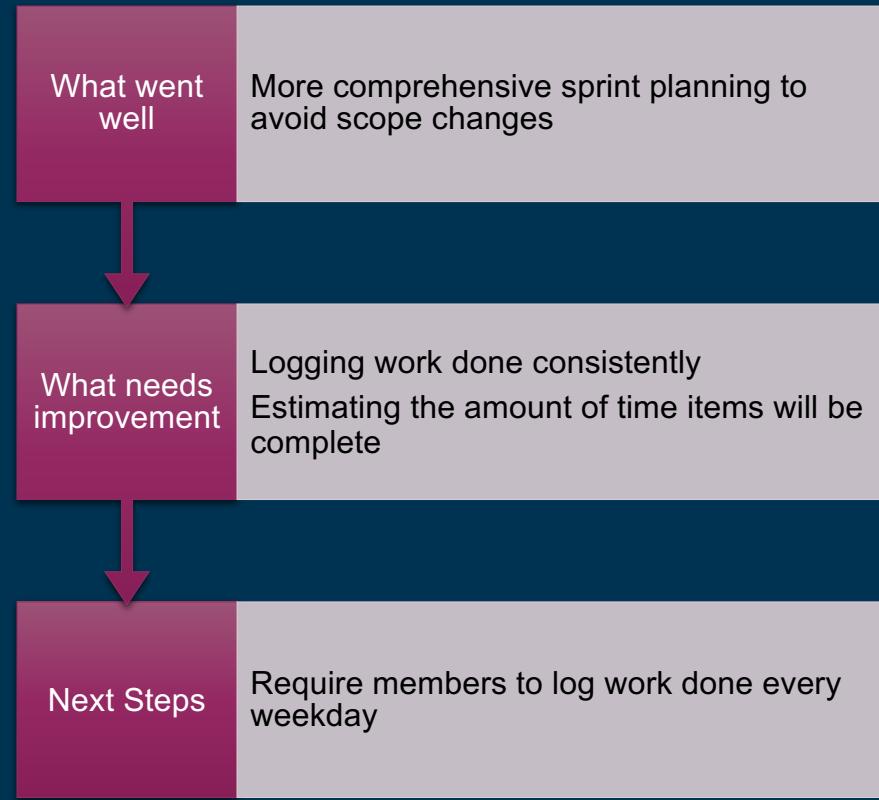
Metrics
➤ 2 User Stories
➤ 13 Story Points Total
➤ 4 Tasks

Sprint Goal
• Host our application to the cloud and add a new illness

Highest Story
• Hosting our application to the Cloud (AWS)

Retrospectives

Retrospectives



Conclusion

Link to GitHub

<https://github.com/jazzymaya/HiddenAgility/wiki>