Document Header

TokiBattle
Requirements and Specification Document
11/04/2019, version 1

Project Abstract

TokiBattle is an online web application allowing two users to battle with Tokimon online. Each competitor has a team of Tokimon with unique moves and abilities. The objective of a Tokimon battle is to knock out each Tokimon on the opponent's team. In each simultaneously executed turn, players can use their currently active Tokimon to attack the opponent or switch their active Tokimon to another Tokimon on their team. Tokimon moves do different amounts of damage based on the stats of the attacker and defender. Users can create an account and log in, then challenge another user to a battle or accept a challenge. TokiBattle will include sprites for each Tokimon, as well as animations for the moves. Information about each individual Tokimon's stats and moves, as well as information about the moves themselves, will be stored in a database. TokiBattle will allow players to experience an alternative to Pokémon battles, with a different set of creatures and different type rules (in Pokémon, each creature has one or two types, whereas Tokimon have an integer value between 0 and 100 for every type). This fresh take on the popular game format will appeal to Pokémon fans who want to experience a different metagame.

Customer

TokiBattle has two types of customers. The first type is the hardcore Pokémon fan who enjoys battling with other trainers on their Nintendo device or on online services such as Pokémon Showdown. This customer already clearly enjoys creature-battling games with simultaneously executed turns, and will likely be curious to see which strategies will succeed with TokiBattle's unique stat system. This customer needs an interesting and strategic battling system.

Our second kind of customer is a more casual player, who likely grew up playing Pokémon but has not played any of the newer games in years. This kind of customer exists in droves, and often feels a great sense of nostalgia for the original 151 Pokémon but dislikes the design of the newer creatures. The key for attracting this kind of customer will be to create simple yet loveable sprites for our Tokimon. Unlike our other customer, this one does not care very much about the game's mechanical intricacies, and is unlikely to notice the difference between TokiBattle and Pokémon's stat and type systems. The game's "juice" (sprites, animations, sounds) will be more important for winning this customer over.

Competitive Analysis

TokiBattle's biggest competitor is also its greatest benefactor. We obviously do not expect TokiBattle to overtake Pokémon as the number one creature battling video game. In fact, the majority of Pokémon's playerbase is unlikely to see a reason to play Tokimon over its big brother. But we are not trying to target that whole playerbase – just the two kinds of customers listed above. Because of this, TokiBattle actually relies on the association with Pokémon so that customers will immediately know what kind of game it is, and then can discover the differences between the two games.

As noted in the "Customers" section, TokiBattle will benefit from its unique type and stat system. This sets the game apart from Pokémon and will inspire a certain kind of player to try the game. TokiBattle also is in the position to capture nostalgic fans who are jaded by the design choices and complexity of the newer Pokémon games.

TokiBattle's similarities to Pokémon will be its "foot-in-the-door," while the differences between the two games will keep our users wanting to keep coming back for more.

User Stories

Actors:

- Regular user (person who battles Tokimon on the site)
- Administrator (person who can battle Tokimon and see information from other users)

Login - 2 points – Iteration 1

Story: As a regular user, I want to create my account and log in with my username and password so that I soon will be able to choose some Tokimon and start battling!

Triggers/Preconditions: I am interested in playing TokiBattle, but I know that I need an account to do so. Currently there is no option to log into TokiBattle, so no one can make teams or battle.

Actions/Postconditions: The TokiBattle development team will add a login functionality using a database of usernames and passwords. Usernames must be unique as they are the database's primary key. Once this feature has functionality, users will be able to create an account and log in, and soon they will be able to create teams of Tokimon that are associated with their unique username.

Acceptance Tests:

- Users can create an account and access the landing page.
- Returning users can re-log into their account with the username and password they chose.
- Passwords should be hidden from view while they are being typed.
- An invalid username with an invalid password should return a failure message.
- An invalid username with a valid password should return a failure message.
- A valid username with an invalid password should return a failure message.
- A blank username with a valid password should return an error message.
- A valid username with a blank password should return an error message.
- A blank username with a blank password should return an error message.

Administrator Login - 2 points – Iteration 1

Story: As an administrator, I want to be able to see all of the users and (when the feature is available) their teams of Tokimon so that I can better balance each Tokimon's stats and moveset.

Triggers/Preconditions: Without administrator permission, it is not easy for anyone to see information such as users and teams, because that data is stored in databases, which are less accessible and user-friendly than displays on a web page. Currently, there is no administrator login.

Actions/Postconditions: The TokiBattle development team will hard-code several usernames as administrators in the database of users. The development team will then create a button with a link to a page that shows all TokiBattle usernames. This page will only be available to administrators. The data on this page is pulled from the database of users.

Acceptance Tests:

- Administrator can create an account and access the landing page.
- Returning administrators can re-log into their account with the username and password they chose.
- Passwords should be hidden from view while they are being typed.
- An invalid username with an invalid password should return a failure message.
- An invalid username with a valid password should return a failure message.
- A valid username with an invalid password should return a failure message.
- A blank username with a valid password should return an error message.
- A valid username with a blank password should return an error message.
- A blank username with a blank password should return an error message.
- Administrators can access the page with the table of users.
- When new users are added, administrators can see the updated table.
- When regular users try to access the administrator-only page, they see a page that says "This page only available for administrators".

Future Stories:

- **Teambuilder 4 points Iteration 2:** As a user who enjoys teambuilding, I want to be able to create and save a team of Tokimon so that I know which Tokimon I will be able to battle with.
- Banhammer 1 point Iteration 2: As an administrator, I want to be able to remove users from the user database so that I can ban toxic players and "lay off" inactive users.
- View Move Data 3 points Iteration 2: As a user who is particularly interested in the mechanics of the game, I want to be able to view the base power, accuracy, and type of each move.
- Online Trainers 3 points Iteration 2: As a user wanting to battle another user, I want to be able to see which users are online.
- Trainer Wants to Fight! 2 points Iteration 2: As a user wanting to battle another user, I want to send a challenge to another user who is online.
- Accept Challenge? 3 points Iteration 2: As a trainer who has received a challenge, I want to have the option accept it, which triggers the battle beginning, or decline it, and return to my business.
- Battle Scene 2 points Iteration 2: As a trainer starting a battle, I want to see an intro animation to get me pumped up for the battle and then see the battlefield.

- I Choose You! 3 points Iteration 4: As a trainer who has just started a battle, I want to be able to choose a Tokimon from my team to start the battle with, and then once my opponent has done the same, I want to see both Tokimon on the screen.
- Make a Move 3 points Iteration 3: As a trainer in a battle, I want to be able to select a move on my currently active Tokimon, and once the opponent has done the same, I want each Tokimon to lose the right amount of health.
- Return! 3 points Iteration 3: As a trainer in a battle, I want to be able to select a Tokimon to switch to instead of using a move. Once the opponent has selected their move, I want my currently active Tokimon to switch.
- Unable to Battle 3 points Iteration 3: As a trainer who has just knocked out my opponent's Tokimon by bringing its HP to 0, I want the opponent's Tokimon to be unable to battle, and the opponent to have to select a new Tokimon and be unable to switch to the knocked out Tokimon.
- **Animations 4 points Iteration 3:** As a trainer in a battle, I want to see animations when Tokimon use moves.
- We Have a Winner! 2 Points Iteration 3: As a trainer who knocked out all of my opponent's Tokimon, I want the screen to say that I won the battle.

User Interface Requirements

Teambuilder page concept. Similar to Pokémon Showdown. Users can select one of their existing teams or create a new one.



After selecting or creating a team, users will be directed to a page where they can add and remove Tokimon from their team. The sprites used in the Pic category are just Pokémon sprites in this mockup, but we'll have our own original sprites. Names, stat numbers and moves are not final.

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Name	Pic	Fire	Water	Elec	Fly	Fight	Ice	HP	Att	Def	Speed	Move	Move	Move	Move	Del
												1	2	3	4	from team
Erichu	3	23	48	88	50	65	76	55	70	30	85	Soar	Zap	Freeze	Wave	Del
Steamo	*	79	71	55	39	30	51	80	33	90	37	Heat	Burn	Freeze	Wave	Del
Enorgy	*	78	67	78	12	19	68	45	91	31	88	Taste	Zap	Freeze	Burn	Del

Available Tokimon

Name	Pic	Fire	Water	Elec	Fly	Fight	Ice	HP	Att	Def	Speed	Move	Move	Move	Move	Add
												1	2	3	4	to team
Liono	*	80	12	33	20	55	34	80	70	30	71	Heat	Zap	Freeze	Wave	Add
Seabie	30	10	71	30	90	31	55	80	42	80	60	Soar	Kick	Freeze	Wave	Add
Chana		85	44	78	34	5	10	66	90	31	22	Code	Zap	Teach	Burn	Add
Nodie	©	32	44	81	68	12	41	36	36	36	89	Soar	Zap	Freeze	Burn	Add
Thom	4	100	52	60	20	17	46	1	100	1	100	Soar	Zap	Code	Burn	Add
Leady	Q.	78	66	32	11	16	17	88	66	78	55	Heat	Kick	Freeze	Wave	Add
Penny		89	34	22	76	11	55	45	45	33	91	Roll	Spin	Kick	Jump	Add
Maptu	₹,	55	89	45	33	55	56	56	55	85	71	Soar	Spin	Freeze	Wave	Add
Skyte	3	88	10	77	77	10	12	78	66	45	78	Taste	Kick	Kick	Burn	Add

Battle screen concept. Each player only sees their own screen, where they can choose to either use a move or switch Tokimon. Similar to Pokémon games.

