

# Practical Task Examination: TACoin

CSE233 Fall 2021

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Group 2 - Section 2

ASU - CESS

## Part 1

### Using Github

Github repo: <https://github.com/Mmokhtar/AgilePracticalExam>

### Using Jira

#### 1. Create your project and provide a short description

**Project Description:** TACoin (Token Acquisition Coin) is a coin aimed at standardizing the creation and deployment of blockchain tokens (both fungible and non-fungible) which represent both digital and real-life assets. The main advantage of TACoin's system is the fact that it is both HTTP-based, and does not rely on the blockchain for the code that can be implemented off the blockchain network (unlike Ethereum).

The screenshot shows the Jira Software interface. At the top, there is a navigation bar with 'Jira Software', 'Your work', 'Projects' (which is underlined), 'Filters', 'Dashboards', 'People', 'Apps', and a 'Create' button. To the right of the navigation bar is a search bar and some user icons. Below the navigation bar, there is a table for managing projects. A 'Create project' button is located in the top right corner of this section.

Below the main interface, a modal window titled 'Project templates' is displayed. It has a sidebar on the left with categories like 'Project templates', 'Software development', 'Service management', 'Work management', etc. The 'Software development' category is selected and highlighted with a blue background. Inside the main area, there is a section titled 'Software development' with a sub-section 'Scrum'. The 'Scrum' section is also highlighted with a red box. Other sections shown include 'Kanban' and 'Bug tracking'.

# Scrum

The Scrum template helps teams work together using sprints to break down large, complex projects into bite-sized pieces of value. Encourage your team to learn through incremental delivery, self-organize while working on a problem, and regularly reflect on their wins and losses to continuously improve.

**Plan upcoming work in a backlog**

Prioritize and plan your team's work on the backlog. Break down work from your project roadmap, and order work items so your team knows what to deliver first.

[Learn more about the backlog](#)

**Organize cycles of work into sprints**

Sprints are short, time-boxed periods when a team collaborates to complete a set amount of customer value. Use sprints to drive incremental delivery, allow your team to ship high-quality work and deliver value faster.

[Learn more about sprints](#)

**Understand your team's velocity**

Improve predictability on planning and delivery with out-of-the-box reports, including the sprint

**PRODUCT**  
Jira Software

**RECOMMENDED FOR**  
Teams that deliver work on a regular cadence  
DevOps teams that want to connect work across their tools

**ISSUE TYPES**  
 Epic  
 Story  
 Bug  
 Task  
 Sub-task

**WORKFLOW**  
**TO DO**  
**IN PROGRESS**  
**DONE**

Next: Select a project type [Use template](#)

**① Project template**


**Scrum**  
Sprint toward your project goals with a board, backlog, and roadmap.
[Change template](#)

**② Choose a project type**

**⚠️** You'll need to create a new project if you decide to switch project types later.

Team-managed	Company-managed
<b>Set up and maintained by your team.</b> For teams who want to control their own working processes and practices in a self-contained space. Mix and match agile features to support your team as you grow in size and complexity.	<b>Set up and maintained by your Jira admins</b> For teams who want to work with other teams across many projects in a standard way. Encourage and promote organizational best practices and processes through a shared configuration.
<b>Simplified configuration</b>  Get up and running quickly, with simplified configuration.	<b>Expert configuration</b>  Benefit from complete control with expert configuration, customization and flexibility.
Anyone on your team can set up and maintain	Set up and maintained by your Jira admins
<a href="#" style="background-color: #005293; color: white; padding: 5px 10px; border-radius: 5px;">Select a team-managed project</a>	<a href="#" style="background-color: #0072bc; color: white; padding: 5px 10px; border-radius: 5px;">Select a company-managed project</a>

The last project you created was a team-managed project

**Add project details**

You can change these details anytime in your project settings.

Name * <input type="text" value="TACoin"/>	Template <a href="#">Change template</a>  <b>Scrum</b> Sprint toward your project goals with a board, backlog, and roadmap.
Key <small>ⓘ</small> * <input type="text" value="TAC"/>	Type <a href="#">Change type</a>  <b>Team-managed</b> Control your own working processes and practices in a self-contained space.
<input type="checkbox"/> <b>Connect repositories, documents, and more</b> <small>Sync your team's work from other tools with this project for better visibility, access, and automation.</small>	<a href="#">Cancel</a> <a href="#" style="background-color: #005293; color: white; padding: 5px 10px; border-radius: 5px;">Create project</a>

The screenshot shows the Jira Software interface. At the top, there's a navigation bar with links like 'Your work', 'Projects', 'Filters', 'Dashboards', 'People', 'Apps', and a 'Create' button. Below the navigation is a banner that says 'Does your team need more from Jira? Get a free trial of our Standard plan.' On the left, a sidebar for the project 'TACoin Software project' lists options such as Roadmap, Backlog, Board (which is selected), Code, Project pages, Design tools, Add shortcut, and Project settings. The main area displays a board titled 'TAC board'. It has three columns: 'TO DO', 'IN PROGRESS', and 'DONE'. A large blue circular arrow icon is in the 'TO DO' column. Below it, a message says 'You haven't started a sprint' and 'You can't do anything on your board because you haven't started a sprint yet. Go to the backlog to plan and start a sprint.' A 'Go to Backlog' button is present. To the right of the board is a 'Quickstart' modal window. The modal has a purple header and contains sections for 'Create a project', 'Set up your board' (with a sub-section for 'Set up your Jira team-managed board'), and other help links like 'Create an issue', 'Invite your teammates', 'Connect your tools', 'Get the mobile app', and 'Find help'. There are also buttons for 'Show me', 'See training courses', 'Give feedback', and 'Dismiss Quickstart'.

2. Create a product backlog that includes at least 10 stories divided into epics. Each item should contain a title, a user story, an estimation in story points, an assignee, and additional details if needed.

**Due to the inability to assign multiple teammates to the same story in Jira, all the stories and the assigned teammates for each story is in the README.md**

Now we start creating our user stories:

The screenshot shows the Jira Software interface for the TACoin project. The left sidebar has 'Backlog' selected. The main area displays the 'Backlog' section with a message: 'Plan your sprint' and 'Drag issues from the Backlog section, or create new issues, to plan the work for this sprint. Select Start sprint when you're ready.' Below this is a 'What needs to be done?' section containing one backlog item: 'As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.' The status bar at the bottom right shows 0 To Do, 1 In Progress, and 0 Done.

This screenshot is identical to the one above, showing the Jira Software interface for the TACoin project. The backlog contains the same one item: 'As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.' A red arrow points to the 'TO DO' status indicator in the bottom right corner of the backlog card.

Jira Software

Projects / TACoin

**Backlog**

Search | User | Epic | Insights

TAC Sprint 1 (Add dates) (0 issues)

Plan your sprint  
Drag issues from the Backlog section, or create new issues, to plan the work for this sprint. Select Start sprint when you're ready.

What needs to be done?

Backlog (1 issue)

TAC-2 As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have. (13 TO DO)

+ Create Issue

Then the same steps were repeated for all the other user stories.

Jira Software

Projects / TACoin

**Backlog**

Search | User | Epic | Insights

TAC-2 As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have. (13 TO DO)

TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens. (20 TO DO)

TAC-4 As a user, I would like to transfer TACoins to another account to easy monetary exchange. (20 TO DO)

TAC-5 As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds. (20 TO DO)

TAC-6 As a token creator, I would like to create a new CCToken to mint it later on. (8 TO DO)

TAC-7 As a token owner, I would like to mint an owned CCToken to give it to other users. (13 TO DO)

TAC-8 As a token owner, I would like to transfer ownership of my token to another user. (20 TO DO)

TAC-9 As an application developer, I would like to have clear documentation for the protocol used for communication between nodes in the network to ... (40 TO DO)

TAC-10 As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and receive TACoins and tokens pr... (30 TO DO)

TAC-11 As an application developer, I would like to know how TACoin's network works through online articles to decide whether I should use it in my app... (20 TO DO)

TAC-12 As an application developer, I would like to understand the types of tokens in the TACoin network through online articles to know which type is b... (13 TO DO)

TAC-13 As an application developer, I would like to have a public forum where I can ask questions that I cannot find an answer to it through the internet t... (20 TO DO)

TAC-14 As a trader, I would like blocks in the blockchain to be quickly added so that TACoin transfers are done quickly. (30 TO DO)

TAC-15 As a miner and/or trader, I would like to have TACoin in a public marketplace so that I can convert my TACoins into other fiat currencies. (60 TO DO)

TAC-16 As a miner, I would like to have GPU-based mining software to mine more TACoins in less time and with less power-consumption. (60 TO DO)

TAC-17 As a trader, I would like to exchange TACoins and tokens directly through the blockchain network to ensure I cannot be scammed through anothe... (80 TO DO)

TAC-18 As a trader, I would like to know how transfers are safe and secure so that I can buy a lot TACoins with low risk. (30 TO DO)

You're in a team-managed project

Learn more

Then we start creating the epics:

Jira Software interface showing the 'Backlog' section for the 'TACoin' project. The 'Epic' dropdown menu is open, with the 'Epic panel' option highlighted by a red arrow. The backlog contains 17 issues, all labeled 'TO DO'. A callout box says 'Your project has no Epic'.

**TAC Sprint 1** (0 issues)

- TAC-2 As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.
- TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens.
- TAC-4 As a user, I would like to transfer TACoins to another account to easy monetary exchange.
- TAC-5 As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds.
- TAC-6 As a token creator, I would like to create a new CCToken to mint it later on.
- TAC-7 As a token owner, I would like to mint an owned CCToken to give it to other users.
- TAC-8 As a token owner, I would like to transfer ownership of my token to another user.

Jira Software interface showing the 'Backlog' section for the 'TACoin' project. The 'Epic' dropdown menu is open, with the 'Epic panel' option selected, indicated by a red arrow. The backlog contains 17 issues, all labeled 'TO DO'. A callout box says 'Your project has no Epic'.

**TAC Sprint 1** (0 issues)

- TAC-2 As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.
- TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens.
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- TAC-7 As a token owner, I would like to mint an owned CCToken to give it to other users.
- TAC-8 As a token owner, I would like to transfer ownership of my token to another user.

Jira Software Your work Projects Filters Dashboards People Apps Create

Projects / TACoin Backlog

Epic

Plan and prioritize large chunks of work.

Create your first epic to start capturing and breaking down work for your team.

+ Create Epic

TAC Sprint 1 Add dates (0 issues)

Plan your sprint Drag issues from the Backlog section, or create new issues, to plan the work for this sprint. Select Start sprint when you're ready.

+ Create issue

Backlog (17 issues) Create sprint

- TAC-2 As a user, I would like to easily and securely view my wallet balance to be able to know how much TAC... 13 TO DO
- TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens. 20 TO DO
- TAC-4 As a user, I would like to transfer TACoins to another account to easy monetary exchange. 20 TO DO
- TAC-5 As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my f... 20 TO DO
- TAC-6 As a token creator, I would like to create a new CCtoken to mint it later on. 8 TO DO
- TAC-7 As a token owner, I would like to mint an owned CCtoken to give it to other users. 13 TO DO
- TAC-8 As a token owner, I would like to transfer ownership of my token to another user. 20 TO DO

You're in a team-managed project Learn more

Jira Software Your work Projects Filters Dashboards People Apps Create

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Projects / TACoin Backlog

Epic

Plan and prioritize large chunks of work.

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TAC Sprint 1 Add dates (0 issues)

Plan your sprint Drag issues from the Backlog section, or create new issues, to plan the work for this sprint. Select Start sprint when you're ready.

+ Create issue

Backlog (17 issues) Create sprint

- TAC-2 As a user, I would like to easily and securely view my wallet balance to be able to know how much TAC... 13 TO DO
- TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens. 20 TO DO
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- TAC-5 As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my f... 20 TO DO
- TAC-6 As a token creator, I would like to create a new CCtoken to mint it later on. 8 TO DO
- TAC-7 As a token owner, I would like to mint an owned CCtoken to give it to other users. 13 TO DO
- TAC-8 As a token owner, I would like to transfer ownership of my token to another user. 20 TO DO

|what will the Epic be called?

You're in a team-managed project Learn more

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**Backlog**

**Epic**

Issues without epic

> As a user, I would like to own and trade TACoins and tokens to ease the exchange of money and commodities.

What will the Epic be called?

**TAC Sprint 1** Add dates (0 issues)

Plan your sprint  
Drag issues from the Backlog section, or create new issues, to plan the work for this sprint. Select Start sprint when you're ready.

**Backlog (17 issues)**

Issue	Priority	Status	Assignee
TAC-2 As a user, I would like to easily and securely view my wallet balance to be able to know how much TAC...	13	TO DO	
TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens.	20	TO DO	
TAC-4 As a user, I would like to transfer TACoins to another account to easy monetary exchange.	20	TO DO	
TAC-5 As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my f...	20	TO DO	
TAC-6 As a token creator, I would like to create a new CCToken to mint it later on.	8	TO DO	
TAC-7 As a token owner, I would like to mint an owned CCToken to give it to other users.	13	TO DO	
TAC-8 As a token owner, I would like to transfer ownership of my token to another user.	20	TO DO	

The same steps were repeated for the two other epics.

Does your team need more from Jira? [Get a free trial of our Standard plan.](#)

**Backlog**

**Epic**

Issues without epic

> As a user, I would like to own and trade TACoins and tokens to ease the exchange of money and commodities.

> As an application developer, I would like to incorporate TACoins and tokens into my application to provide decentralized and secure software.

> As a miner and/or trader, I would like to start a business and gain money via the exchange of TACoins and tokens.

+ Create Epic

**TAC Sprint 1** Add dates (0 issues)

Plan your sprint  
Drag issues from the Backlog section, or create new issues, to plan the work for this sprint. Select Start sprint when you're ready.

**Backlog (17 issues)**

Issue	Priority	Status	Assignee
TAC-2 As a user, I would like to easily and securely view my wallet balance to be able to know how much TAC...	13	TO DO	
TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens.	20	TO DO	
TAC-4 As a user, I would like to transfer TACoins to another account to easy monetary exchange.	20	TO DO	
TAC-5 As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my f...	20	TO DO	
TAC-6 As a token creator, I would like to create a new CCToken to mint it later on.	8	TO DO	
TAC-7 As a token owner, I would like to mint an owned CCToken to give it to other users.	13	TO DO	
TAC-8 As a token owner, I would like to transfer ownership of my token to another user.	20	TO DO	

And now we assign the stories to epics:

This screenshot shows the Jira Software Backlog page for the TACoin project. The left sidebar includes links for Roadmap, Backlog (selected), Board, Code, Project pages, Design tools, Add shortcut, and Project settings. The main area displays the Backlog under the TAC Sprint 1 section. A sidebar on the right provides insights. The backlog lists 17 issues, each with a summary, priority (13, 20, 20, 20, 8, 13, 20), status (TO DO), and a 'More' button. A 'Plan your sprint' section at the top right allows dragging issues from the backlog to plan work for the sprint.

This screenshot is similar to the previous one but includes a context menu over the first backlog item. The 'Actions' menu is open, showing options like 'Add flag', 'Add parent' (which is highlighted with a red box), 'Copy issue link', 'Delete', 'Move to', 'TAC Sprint 1', 'Top of backlog', 'Bottom of backlog', and 'More'. The rest of the backlog and interface elements are identical to the first screenshot.

Add epic

Select a parent issue for this issue. Issues can only belong to one parent issue at a time.

Epic

Choose parent issue

- TAC-19 As a user, I would like to own and trade TACoins and tokens to ease th...
- TAC-20 As an application developer, I would like to incorporate TACoins and tok...
- TAC-21 As a miner and/or trader, I would like to start a business and gain mon...

Add epic

Select a parent issue for this issue. Issues can only belong to one parent issue at a time.

Epic

TAC-19 As a user, I would like to own and trade TACoins and tokens to eas...

Done Cancel

The screenshot shows the Jira Software interface for the TACoin project. The left sidebar includes links for Roadmap, Backlog (selected), Board, Code, Project pages, Design tools, Add shortcut, and Project settings. A message at the bottom left says 'You're in a team-managed project' with a 'Learn more' link. The main area displays the 'Backlog' for the TACoin project. It features an 'Epic' section with two items and a 'Backlog' section containing 17 issues. The backlog issues are as follows:

- TAC-2 As a user, I would like to easily and securely view my wallet balance t... AS A USER, I WOULD LIKE TO OW... 13 TO DO
- TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens. AS A USER, I WOULD LIKE TO OW... 20 TO DO
- TAC-4 As a user, I would like to transfer TACoins to another account to easy ... AS A USER, I WOULD LIKE TO OW... 20 TO DO
- TAC-5 As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my f... AS A USER, I WOULD LIKE TO OW... 20 TO DO
- TAC-6 As a token creator, I would like to create a new CCToken to mint it later on. AS A TOKEN CREATOR, I WOULD LIKE TO OW... 8 TO DO
- TAC-7 As a token owner, I would like to mint an owned CCToken to give it to other users. AS A TOKEN OWNER, I WOULD LIKE TO OW... 13 TO DO
- TAC-8 As a token owner, I would like to transfer ownership of my token to another user. AS A TOKEN OWNER, I WOULD LIKE TO OW... 20 TO DO

The same steps were repeated for all other stories:

The screenshot shows the Jira Software interface for the TACoin project, similar to the previous one but with 18 items in the backlog. The backlog items are as follows:

- TAC-2 As a user, I would like to easily and securely view my wallet balance t... AS A USER, I WOULD LIKE TO OW... 13 TO DO
- TAC-3 As a user, I would like to create a new wallet to hold my TACoins and tokens. AS A USER, I WOULD LIKE TO OW... 20 IN PROGRESS
- TAC-4 As a user, I would like to transfer TACoins to another account to easy ... AS A USER, I WOULD LIKE TO OW... 20 TO DO
- TAC-5 As a user, I would like to manage, backup and restore multiple wallet... AS A USER, I WOULD LIKE TO OW... 20 TO DO
- TAC-6 As a token creator, I would like to create a new CCToken to mint it late... AS A TOKEN CREATOR, I WOULD LIKE TO OW... 8 TO DO
- TAC-7 As a token owner, I would like to mint an owned CCToken to give it to othe... AS A TOKEN OWNER, I WOULD LIKE TO OW... 13 TO DO
- TAC-8 As a token owner, I would like to transfer ownership of my token to anothe... AS A TOKEN OWNER, I WOULD LIKE TO OW... 20 TO DO
- TAC-9 As an application developer, I would like to have clear documentatio... AS AN APPLICATION DEVELOPER, I WOULD LIKE TO HAV... 40 TO DO
- TAC-10 As an application developer, I would like to have a ready-to-use wra... AS AN APPLICATION DEVELOPER, I WOULD LIKE TO HAV... 30 TO DO
- TAC-11 As an application developer, I would like to know how TACoin's net... AS AN APPLICATION DEVELOPER, I WOULD LIKE TO KNO... 20 TO DO
- TAC-12 As an application developer, I would like to understand the types of ... AS AN APPLICATION DEVELOPER, I WOULD LIKE TO UNDE... 13 TO DO
- TAC-13 As an application developer, I would like to have a public forum whe... AS AN APPLICATION DEVELOPER, I WOULD LIKE TO HAV... 20 TO DO
- TAC-14 As a miner and/or trader, I would like blocks in the blockchain to be quickly added... AS A MINER AND/OR TRADER, I WOULD LIKE TO HAV... 30 TO DO
- TAC-15 As a miner and/or trader, I would like to have TACoin in a public mar... AS A MINER AND/OR TRADER, I WOULD LIKE TO HAV... 60 TO DO
- TAC-16 As a miner, I would like to have GPU-based mining software to mine ... AS A MINER AND/OR TRADER, I WOULD LIKE TO HAV... 60 TO DO
- TAC-17 As a trader, I would like to exchange TACoins and tokens directly thr... AS A TRADER, I WOULD LIKE TO EXCHANGE TACOINS AND ... 80 TO DO
- TAC-18 As a trader, I would like to know how transfers are safe and secure s... AS A TRADER, I WOULD LIKE TO KNOW HOW TRANSFERS ARE ... 30 TO DO

Then the items were ordered as per the convention stated in the README.md and in the answer for questions 3&4.

The screenshot shows the Jira Software interface for the TACoin project. The left sidebar contains navigation links: Jira Software, Your work, Projects, Filters, Dashboards, People, Apps, Create, Roadmap, Backlog (selected), Board, Code, Project pages, Design tools, Add shortcut, and Project settings. A message at the top right says, "Does your team need more from Jira? Get a free trial of our Standard plan." The main area is titled "Backlog" and shows the following structure:

- Epic:**
  - Issues without epic
  - As a user, I would like to own and trade TACoins and tokens to ease the exchange of money and commodities.
  - As an application developer, I would like to incorporate TACoins and tokens into my application to provide decentralized and secure software.
  - As a miner and/or trader, I would like to start a business and gain money via the exchange of TACoins and tokens.
- Issues:**
  - TAC-2 As a user, I would like to easily and securely view my wallet balance t... AS A USER, I WOULD LIKE TO OW... 13 TO DO
  - TAC-3 As a user, I would like to create a new wallet to hold my TACoins and ... AS A USER, I WOULD LIKE TO OW... 20 TO DO
  - TAC-4 As a user, I would like to transfer TACoins to another account to easy ... AS A USER, I WOULD LIKE TO OW... 20 TO DO
  - TAC-5 As a user, I would like to manage, backup and restore multiple wallet... AS A USER, I WOULD LIKE TO OW... 20 TO DO
  - TAC-12 As an application developer, I would like to understand the types of ... AS AN APPLICATION DEVELOPER,... 13 TO DO
  - TAC-6 As a token creator, I would like to create a new CCToken to mint it late... AS A USER, I WOULD LIKE TO OW... 8 TO DO
  - TAC-7 As a token owner, I would like to mint an owned CCToken to give it to o... AS A USER, I WOULD LIKE TO OW... 13 TO DO
  - TAC-8 As a token owner, I would like to transfer ownership of my token to a... AS A USER, I WOULD LIKE TO OW... 20 TO DO
  - TAC-10 As an application developer, I would like to have a ready-to-use wra... AS AN APPLICATION DEVELOPER,... 30 TO DO
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  - TAC-18 As a trader, I would like to know how transfers are safe and secure s... AS A MINER AND/OR TRADER, I W... 30 TO DO
  - TAC-14 As a trader, I would like blocks in the blockchain to be quickly added... AS A MINER AND/OR TRADER, I W... 30 TO DO
  - TAC-15 As a miner and/or trader, I would like to have TACoin in a public mar... AS A MINER AND/OR TRADER, I W... 60 TO DO
  - TAC-16 As a miner, I would like to have GPU-based mining software to mine ... AS A MINER AND/OR TRADER, I W... 60 TO DO
  - TAC-17 As a trader, I would like to exchange TACoins and tokens directly thr... AS A MINER AND/OR TRADER, I W... 80 TO DO

3. You should indicate the convention you will use regarding the story point estimation.
4. Order your product backlog items and your rationale must be stated in the git README

***Answer for both 3 & 4: (The rationale and convention are also in the README.md)***

The items in the product backlog are ordered according to the value given to stakeholders. This value is decided according to how much it makes the cryptocurrency usable for the real-life use cases of the coin. For example, TACoins themselves are more important than tokens because the exchange of money is more common in real life than the exchange of commodities. Moreover, exchanging commodities for money (TACoin) is prioritized because it is more common than exchanging them with other commodities, so that is also prioritized.

Things to note:

- The sprint size is initially 2 weeks
- The average story-points per sprint is 90 story points
- A story must be at max 30 story points before going into a sprint
- Epics are sized anywhere from 100 to XXL, and do not follow the fibonacci sequence (can be in any range between 100 and 200)



Story points are estimated in a modified fibonacci sequence, then in the form of T-shirt sizes as follows:

- 1: 10-20 of them can be done in a productive work day
- 2: 6-9 of them can be done in a productive work day
- 3: 3-6 of them can be done in a productive work day
- 5: 2-3 of them can be done in a productive work day
- 8: 1-2 of them can be done in a productive work day
- 13: Takes about 1 productive work day
- 20: Takes about 1-2 productive work days
- 30: Takes about 2-3 productive work days
- 40: Takes about 2-4 productive work days
- 60: Takes about 4-6 productive work days
- 80: Takes about 6-8 productive work days
- 100: Takes about 8-10 productive work days [Epic Sized]
- 200: Takes about 10-20 productive work days [Epic Sized]
- L: Takes about 20-40 productive work days [Epic Sized]
- XL: Takes about 40-60 productive work days [Epic Sized]
- XXL: Takes about 60-80 productive work days [Epic Sized]

\* A productive work day is meant for the whole team

## Part 2

### Using Github

Github repo: <https://github.com/Mmokhtar/AgilePracticalExam>

The average story-points per sprint (for this team) is 90 story points.

The two daily Scrum documents (one for each sprint) can be found [here](#):

[https://docs.google.com/spreadsheets/d/1PmwSIqlR63wPKU5sStW\\_wMGMCKljT-waAUNeVpitqA/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1PmwSIqlR63wPKU5sStW_wMGMCKljT-waAUNeVpitqA/edit?usp=sharing)

A1:A2	A	B	C	D	E
1	Teammate	Question	Sunday	Monday	Week 1
2					Tuesday
3	Mostafa Lotfy	What did you do yesterday?	N/A	Rewrote the first part of the API (viewing balance) in pure JavaScript instead of wrapping C/C++ code.	
4		What will you do today?	Start writing the JavaScript wrapper that enables JS code to view and send TACoins and tokens.	Write the second part of the API (sending TACoins and tokens).	
5		Did you have any obstacles?	The C/C++ code doesn't compile successfully when using Emscripten as the compiler.	No	
6	Ahmed Bakry	What did you do yesterday?	N/A	Decided that making a Wix forum would be the best option.	
7		What will you do today?	Investigate the best platform to contain the forum with highest effectiveness and lowest cost.	Create the Wix forum.	
8		Did you have any obstacles?	No	No	
9					
10					
11					
12					
13					
14					
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17					
18					
19					
20					
21					
22					
23					
24					

+

Sprint 1 Daily Scrum Document

Sprint 2 Daily Scrum Document

B1:B2		Question	A	B	C	D	E
1	2	Teammate	Question	Sunday	Monday	Week 1	Tuesday
3	Youssef Maher	What did you do yesterday?	N/A	Finished the architecture's main components			
4		What will you do today?	Draw the TACoin's architecture on Lucidchart	Start writing the code that generates the wallet keys			
5		Did you have any obstacles?	No	Yes. OpenSSL versions are different between mobile, web and desktop. This causes compatibility issues			
6	Mohamed Mokhtar	What did you do yesterday?	N/A	Chose to use ECC as the encryption algorithm because it is the most secure, with low overhead.			
7		What will you do today?	Find the most suitable encryption algorithm is best to use for backing up wallets with a password.	Write code that encrypts the wallet's keys with a password to a file.			
8		Did you have any obstacles?	Not much publicly available information regarding elliptic-curve cryptography (ECC) is available.	No			
9							
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24							

+ Sprint 1 Daily Scrum Document Sprint 2 Daily Scrum Document

The sprint document for sprint 2 can be found [here](#):

<https://docs.google.com/document/u/0/d/1d1KdLVx8HhLLajzjPVwmWNQXUzcDx64URwjiUd1jNdQ/edit>



## PREVIOUS SPRINT

### Near Vision

At the end of sprint one, a usable form of cryptocurrency should be completed. The cryptocurrency's protocol should be HTTP based, to ease the creation of web-based applications that make use of the service. To make the cryptocurrency secure, the mining process will be based on the SHA-256 hashing algorithm (same as Bitcoin). A simple cross-platform application should be made to communicate with the P2P network.

Basic outlines of the sprint:

- Initial version of the protocol between nodes in the network with future-proofing taken into account
- Cross-platform Web, Desktop & Mobile application with the following features:
  - Ability to create a new wallet
  - Ability to transfer TACoins to another wallet
  - Ability to view TACoin wallet balance
- Initial CPU-based mining software

### Stories Done

- As a user, I would like to create a new wallet to hold my TACoins and tokens. [13 Story Points]
- As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have. [20 Story Points]
- As a user, I would like to transfer TACoins to another account to easy monetary exchange. [20 Story Points]
- As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds. [20 Story Points]
- As an application developer, I would like to understand the types of tokens in the TACoin network through online articles to know which type is best for my business-case. [13 Story Points]

### Stories Planned But Not Done Yet

None

## 86/86 Story Points Done

## NEXT SPRINT

### Near Vision

At the end of sprint two, CCtokens (centrally controlled tokens) should be introduced into the TACoin's network. CCtokens are the first addition that sets aside TACoin's network from other cryptocurrency networks. CCtokens are tokens which are completely controlled and minted by a central entity (e.g. government, company). Both fungible and non-fungible tokens are to be implemented in this sprint.

Basic outlines of the sprint:

- Ability to create new fungible and non-fungible CCtokens
- Ability to mint new CCtoken instances of owned CCtokens
- Ability to view owned CCtokens
- Ability to transfer owned CCtoken instances to other wallets
- Ability to transfer CCtoken ownership to other accounts

### Stories Carried Forward From Last Sprint

None

### New Stories Planned For This Sprint

- As a token creator, I would like to create a new CCtoken to mint it later on. [8 Story Points]
- As a token owner, I would like to mint an owned CCtoken to give it to other users. [13 Story Points]
- As a token owner, I would like to transfer ownership of my token to another user. [20 Story Points]
- As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and receive TACoins and tokens programmatically to reduce development time. [30 Story Points]
- As an application developer, I would like to have a public forum where I can ask questions that I cannot find an answer to it through the internet to speed up my development. [20 Story Points]

## 91 Story Points To Be Done

## Using Jira

1. Design your own workflow and clearly indicate your rationale and Rules used in the README.md

The screenshot shows the Jira Backlog screen for the TACoin project. The backlog is organized into sprints: 'TAC Sprint 1' (0 issues) and 'Backlog' (17 issues). The 'Backlog' section contains several user stories, each with a status (e.g., TO DO, IN PROGRESS, DONE) and a 'Start sprint' button. A sidebar on the left shows project navigation options like Roadmap, Backlog, and Board. A 'Quickstart' sidebar on the right provides links to create a project, set up a board, and other resources.

The screenshot shows the Jira Board screen for the TACoin project. The board has three columns: 'TO DO', 'IN PROGRESS', and 'DONE'. The 'TO DO' column features a large blue circular arrow icon with arrows pointing clockwise and counter-clockwise. Below the icon, text says 'You haven't started a sprint' and 'You can't do anything on your board because you haven't started a sprint yet. Go to the backlog to plan and start a sprint.' A 'Go to Backlog' button is at the bottom of the column. A sidebar on the left shows project navigation options like Roadmap, Backlog, and Board. A red box highlights the three-dot menu icon in the top right corner of the board header.

Jira Software Your work Projects Filters Dashboards People Apps Create

Search

TACoin Software project

Roadmap

Backlog

Board

Code

Project pages

Design tools

Add shortcut

Project settings

You're in a team-managed project

Learn more

Manage workflow

Configure board

Quickstart

Workflow for TACoin

To-do status In-progress status Done status Transition Rule

Update workflow Discard changes

Make work flow your way

Workflows represent your team's process and control how people progress your project's work.

Here, you can add statuses, which appear as drop zones for the cards on your project's board. You can create pathways between statuses called transitions, and automate repetitive actions using rules.

Select a status to reveal more details.

Learn more

Workflow for TACoin

To-do status In-progress status Done status Transition Rule

Update workflow Discard changes

Make work flow your way

Workflows represent your team's process and control how people progress your project's work.

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Select a status to reveal more details.

Learn more

**Workflow for TACoin**

To-do status   In-progress status   Done status   Transition   Rule

**Status**  
Statuses capture the stages of your working process.  
**NAME** Under Design  
**CATEGORY** In progress  
**TRANSITIONS**  
Transitions connect statuses. They represent actions people take to move issues through your workflow.  
 Allow issues in any status to move to this one  
This status needs a transition.

**Workflow for TACoin**

To-do status   In-progress status   Done status   Transition   Rule

**Status**  
Statuses capture the stages of your working process.  
**NAME** To Do  
**CATEGORY** To do  
**TRANSITIONS**  
Transitions connect statuses. They represent actions people take to move issues through your workflow.  
 Allow issues in any status to move to this one  
ANY STATUS → TO DO  
Create  
START → TO DO

**Create transition**

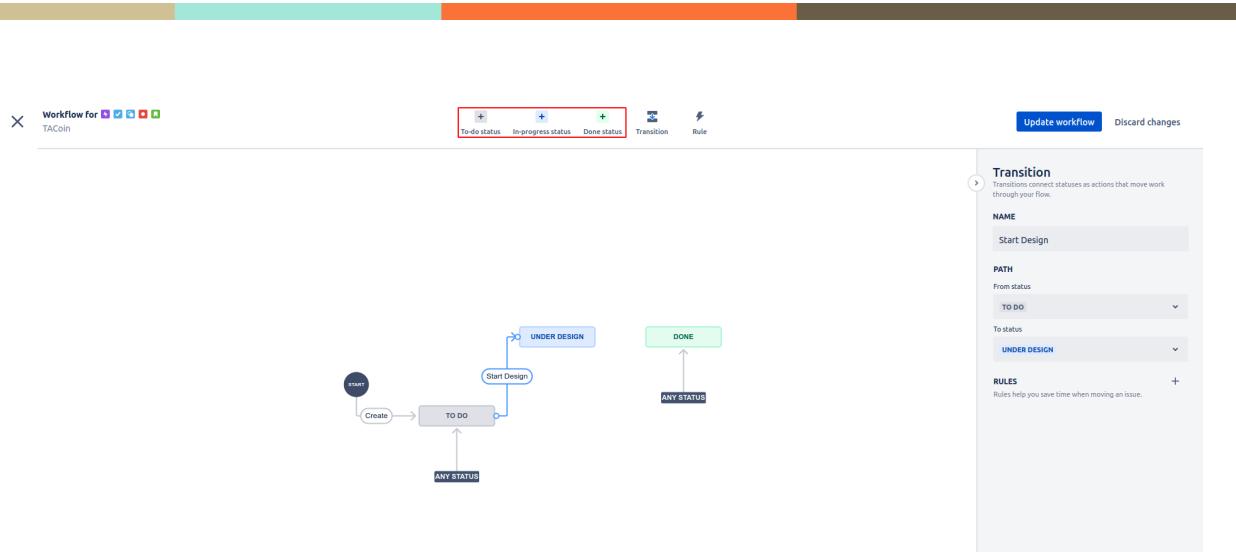
Transitions connect statuses. They represent actions people take to move issues through your workflow. They also appear as drop zones when people move cards across your project's board.

**From status** TO DO   **To status** UNDER DESIGN

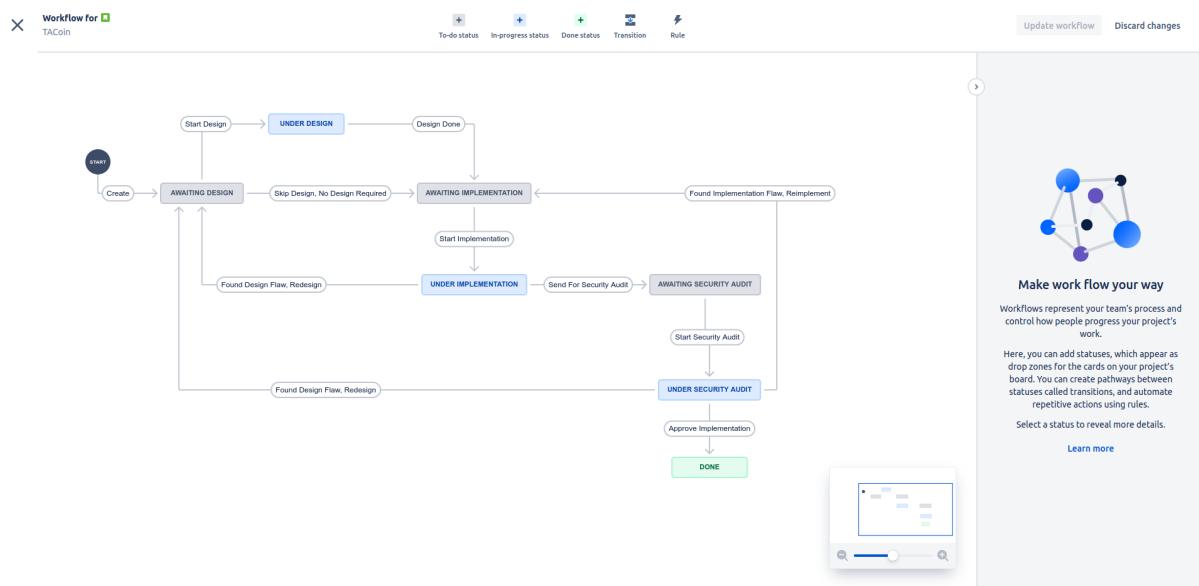
**Name** Start Design

Tip: Name your transition as an action people take to move an issue, like "start work" or "merge".

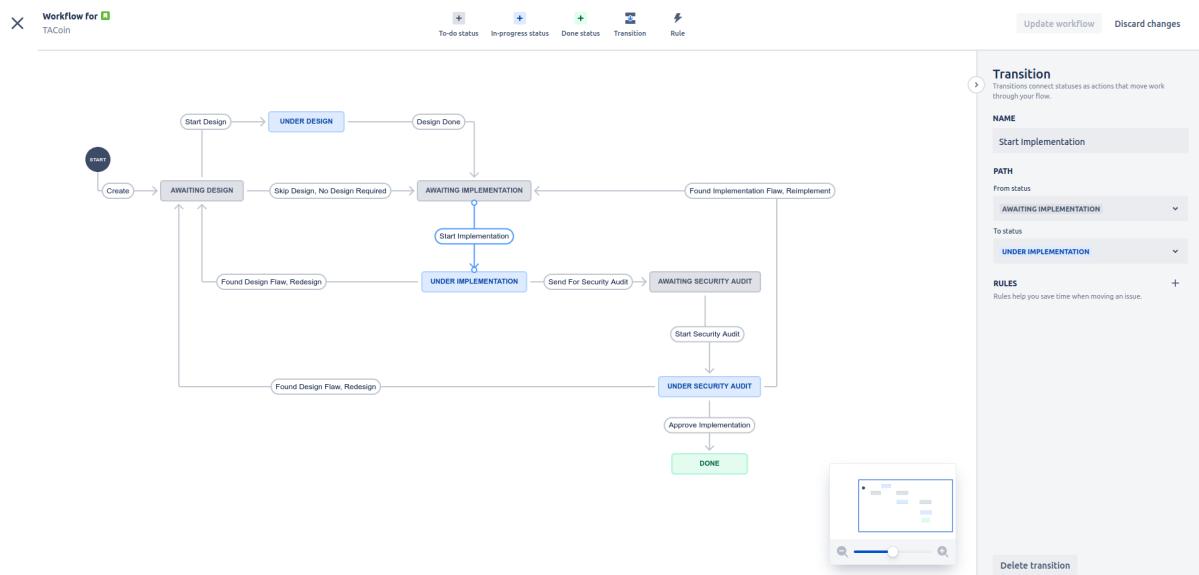
**Create**   **Cancel**

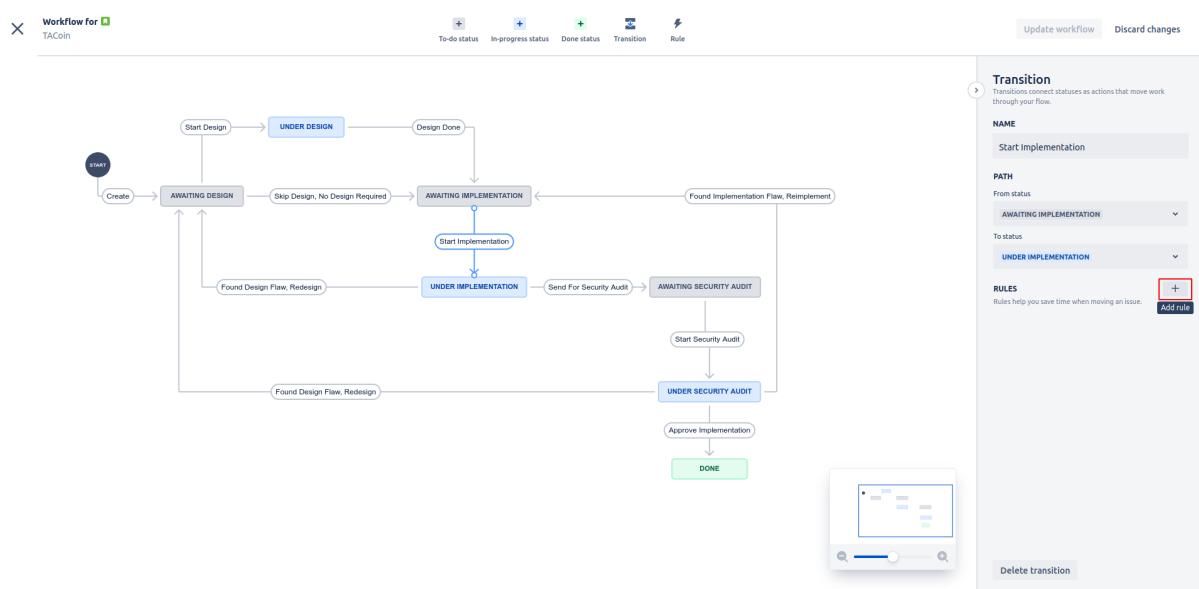


The same was repeated for the rest of the workflow:



Multiple rules were added:





## Add rule to “Start Implementation” transition

- Assign an issue to someone**  
Automatically update an issue's assignee after moving the issue using a particular transition.
- Update an issue field**  
Automatically change the value of an issue field after moving the issue using a particular transition.
- Restrict who can move an issue**  
Only allow certain people to move an issue using a particular transition.
- Check that an issue has been through a status**  
Check that an issue once had a specific status before allowing someone to move it using a particular transition.
- Check an issue's field**  
Check that an issue's field has the correct value before allowing someone to move it using a particular transition.

Select Cancel

To do status In process status Done status Transition Rule

## Add rule to "Start Implementation" transition

**Assign an issue to someone**

Automatically update an issue's assignee after moving the issue using a particular transition.

**For transition**

Start Implementation AWAITING IMPLEMENTATION → UNDER IMPLEMENTATION

To add a rule to a different transition, select the transition in your workflow diagram.

**Assign to**

Choose a person

- The current user
- The issue's reporter
- No one (clear the assignee field)
- uscripter

To do status In progress status Done status Transition Rule

## Add rule to “Start Implementation” transition

**Assign an issue to someone**

Automatically update an issue's assignee after moving the issue using a particular transition.

**For transition**

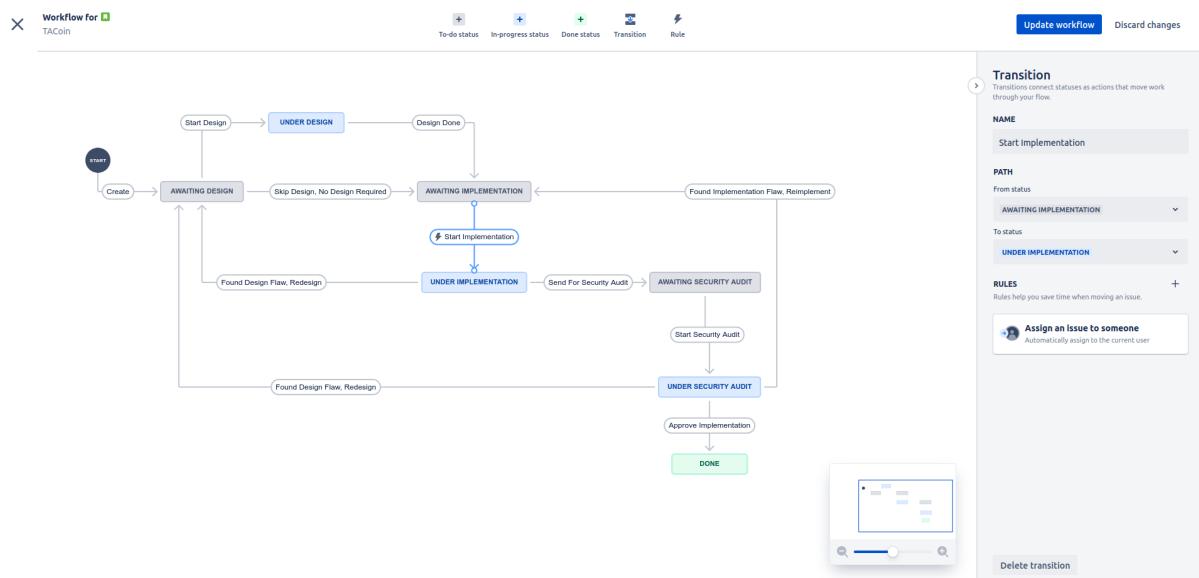
Start Implementation **AWAITING IMPLEMENTATION** → **UNDER IMPLEMENTATION**

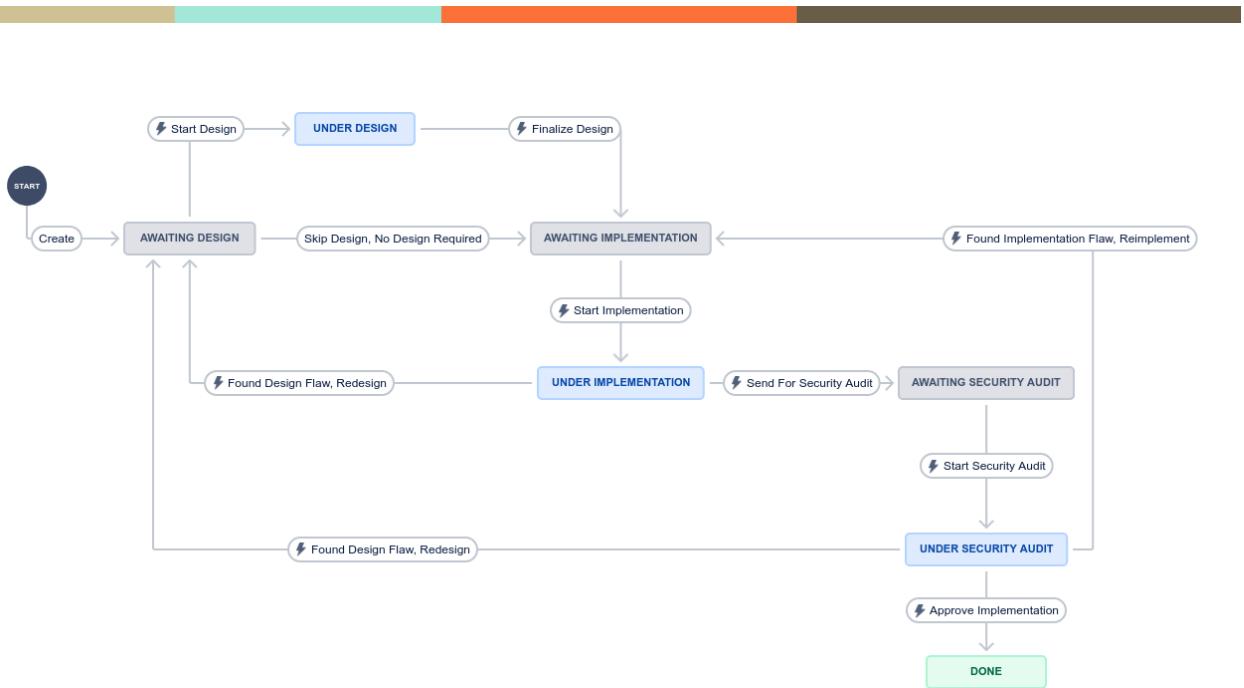
To add a rule to a different transition, select the transition in your workflow diagram.

**Assign to**

**The current user**

**Add** **Cancel**





The same was done for the other transitions. The rules on the transitions are:

- Create: No rules
- Start Design: Automatically assign to current user
- Skip Design, No Design Required: No rules
- Finalize Design: Automatically clear the assignee field + Only the assignee can use this transition
- Start Implementation: Automatically assign to current user
- Found Design Flaw, Redesign: Automatically clear the assignee field + Only the assignee can use this transition
- Found Design Flaw, Redesign: Automatically clear the assignee field + Only the assignee can use this transition
- Send For Security Audit: Automatically clear the assignee field + Only the assignee can use this transition
- Start Security Audit: Automatically assign to current user
- Found Implementation Flaw, Reimplement: Automatically clear the assignee field + Only the assignee can use this transition
- Approve Implementation: Automatically clear the assignee field + Only the assignee can use this transition

## For Sprint 1

### 2. Pull stories into your sprint backlog

The screenshot shows the Jira Software interface for the TACoin project. The 'Backlog' tab is active. A modal window titled 'TAC Sprint 1' displays a list of 5 issues under the heading 'Issues without epic'. One specific issue is highlighted with a red border. The 'Start sprint' button at the bottom right of the modal is also highlighted with a red border.

### 3. Decompose stories into sub-stories if needed

Not needed

4. Put the sprint tasks onto a Kanban board

**Start Sprint**

5 issues will be included in this sprint.

Sprint name \*

Duration \*

2 weeks

Start date \*

12/30/2021 7:36 AM ×

End date \*

1/13/2022 7:36 AM

Sprint goal

As a token creator, I would like to create a new CCToken to mint it later on. AS A USER, I WOULD LIKE

Start Cancel

The screenshot shows a Jira Kanban board for the project 'TACoin'. The board has six columns: Awaiting Design, Under Design, Awaiting Implementation, Under Implementation, Awaiting Security Audit, and Under Security Audit. There are 5 items in the 'Awaiting Design' column. The first item is 'As a user, I would like to create a new wallet to hold my TACoins and tokens.' (TAC-1). The second item is 'As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.' (TAC-2). The third item is 'As a user, I would like to transfer TACoins to another account to easy monetary exchange.' (TAC-3). The fourth item is 'As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds.' (TAC-4). The fifth item is 'As an application developer, I would like to understand the types of tokens in the TACoin network through online articles to know which type is best for my business-case.' (TAC-5). The 'Under Design' column has 1 item: 'As a user, I would like to create a new wallet to hold my TACoins and tokens.' (TAC-6). The 'Under Implementation' column has 1 item: 'As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.' (TAC-7). The 'Under Implementation' and 'Under Security Audit' columns each have 1 item: 'As a user, I would like to transfer TACoins to another account to easy monetary exchange.' (TAC-8) and 'As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds.' (TAC-9) respectively. The 'Awaiting Security Audit' and 'Under Security Audit' columns are currently empty.

## 5. Provide screenshots of what the Kanban chart would look like on 3,5,8,12 days

The screenshot shows a Jira Kanban board for the project 'TACoin'. The board has six columns: Awaiting Design, Under Design, Awaiting Implementation, Under Implementation, Awaiting Security Audit, and Under Security Audit. There are 3 items in the 'Awaiting Design' column. The first item is 'As a user, I would like to transfer TACoins to another account to easy monetary exchange.' (TAC-4). The second item is 'As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds.' (TAC-5). The third item is 'As an application developer, I would like to understand the types of tokens in the TACoin network through online articles to know which type is best for my business-case.' (TAC-12). The 'Under Design' column has 1 item: 'As a user, I would like to create a new wallet to hold my TACoins and tokens.' (TAC-9). The 'Under Implementation' column has 1 item: 'As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.' (TAC-7). The 'Under Implementation' and 'Under Security Audit' columns each have 1 item: 'As a user, I would like to transfer TACoins to another account to easy monetary exchange.' (TAC-8) and 'As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds.' (TAC-9) respectively. The 'Awaiting Security Audit' and 'Under Security Audit' columns are currently empty.

The screenshot shows a Jira Kanban board for the project 'TACoin'. The board has six columns: Awaiting Design, Under Design, Awaiting Implementation, Under Implementation, Awaiting Security Audit, and Under Security Audit. There are 5 items in the 'Awaiting Design' column. The first item is 'As a user, I would like to transfer TACoins to another account to easy monetary exchange.' (TAC-4). The second item is 'As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds.' (TAC-5). The third item is 'As an application developer, I would like to understand the types of tokens in the TACoin network through online articles to know which type is best for my business-case.' (TAC-12). The fourth item is 'As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.' (TAC-3). The fifth item is 'As a user, I would like to create a new wallet to hold my TACoins and tokens.' (TAC-1). The 'Under Design' column has 1 item: 'As a user, I would like to create a new wallet to hold my TACoins and tokens.' (TAC-6). The 'Under Implementation' column has 1 item: 'As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have.' (TAC-7). The 'Under Implementation' and 'Under Security Audit' columns each have 1 item: 'As a user, I would like to transfer TACoins to another account to easy monetary exchange.' (TAC-8) and 'As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds.' (TAC-9) respectively. The 'Awaiting Security Audit' and 'Under Security Audit' columns are currently empty.

The image displays two side-by-side screenshots of a Jira Software board titled "TAC Sprint 1". Both boards have the same structure with six columns: Awaiting Design, Under Design, Done, Awaiting Implementation, Under Implementation, Awaiting Security Audit, and Under Security Audit.

**Top Board (Original State Grouping):**

- Awaiting Design:** Contains one issue: "As an application developer, I would like to understand the types of tokens in the TACoin network through online articles to know which type is best for my business-case." (TAC-12)
- Under Design:** Contains one issue: "As a user, I would like to transfer TACoins to another account to easy monetary exchange." (TAC-4)
- Done:** Contains one issue: "As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have." (TAC-2)
- Awaiting Implementation:** Contains one issue: "As a user, I would like to hold my TACoins and tokens." (TAC-3)
- Under Implementation:** Contains one issue: "As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds." (TAC-5)
- Awaiting Security Audit:** Contains one issue: "As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have." (TAC-2)
- Under Security Audit:** Contains one issue: "As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds." (TAC-5)

**Bottom Board (Modified State Grouping):**

- Awaiting Design:** Contains one issue: "As a user, I would like to create a new wallet to hold my TACoins and tokens." (TAC-4)
- Under Design:** Contains one issue: "As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have." (TAC-2)
- Done:** Contains one issue: "As an application developer, I would like to understand the types of tokens in the TACoin network through online articles to know which type is best for my business-case." (TAC-12)
- Awaiting Implementation:** Contains one issue: "As a user, I would like to transfer TACoins to another account to easy monetary exchange." (TAC-4)
- Under Implementation:** Contains one issue: "As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds." (TAC-5)
- Awaiting Security Audit:** Contains one issue: "As a user, I would like to easily and securely view my wallet balance to be able to know how much TACoins and tokens I have." (TAC-2)
- Under Security Audit:** Contains one issue: "As a user, I would like to manage, backup and restore multiple wallets at the same time to secure my funds." (TAC-5)

## For Sprint 2

### 2. Pull stories into your sprint backlog

The screenshot shows the Jira Software interface for the TACoin project. The main view is the Backlog. On the left, a sidebar provides navigation links for Roadmap, Backlog, Board, Code, Project pages, Design tools, Add shortcut, and Project settings. The main content area displays the backlog under two sections: 'TAC Sprint 2' and 'Backlog'. The 'TAC Sprint 2' section shows 5 issues under the 'Epic' category, all labeled 'AWAITING DESIGN' with a count of 20. The 'Backlog' section shows 7 issues under the 'Epic' category, also labeled 'AWAITING DESIGN' with a count of 20. Each issue is accompanied by a brief description and a link to its details.

Category	Issue ID	Description	Status	Count
TAC Sprint 2	TAC-5	As a token creator, I would like to create a new CCToken to mint it later on.	AWAITING DESIGN	20
	TAC-7	As a token owner, I would like to mint an owned CCToken to give it to other users.	AWAITING DESIGN	20
	TAC-8	As a token owner, I would like to transfer ownership of my token to another user.	AWAITING DESIGN	20
	TAC-10	As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and receive TACoins and tokens programmatically to reduce development time.	AWAITING DESIGN	20
	TAC-13	As an application developer, I would like to have a public forum where I can ask questions that I cannot find an answer to it through the internet to speed up my development.	AWAITING DESIGN	20
Backlog	TAC-11	As an application developer, I would like to know how TACoin's network works through online articles to decide whether I should use it in my application.	AWAITING DESIGN	20
	TAC-9	As an application developer, I would like to have clear documentation for the protocol used for communication between nodes in the network to incorporate in my own application.	AWAITING DESIGN	20
	TAC-18	As a trader, I would like to know how transfers are safe and secure so that I can buy a lot TACoins with low risk.	AWAITING DESIGN	20
	TAC-14	As a trader, I would like blocks in the blockchain to be quickly added so that TACoin transfers are done quickly.	AWAITING DESIGN	20
	TAC-15	As a miner and/or trader, I would like to have TACoin in a public marketplace so that I can convert my TACoins into other fiat currencies.	AWAITING DESIGN	20
	TAC-16	As a miner, I would like to have GPU-based mining software to mine more TAcoins in less time and with less power-consumption.	AWAITING DESIGN	20
	TAC-17	As a trader, I would like to exchange TAcoins and tokens directly through the blockchain network to ensure I cannot be scammed through another website.	AWAITING DESIGN	20

### 3. Decompose stories into sub-stories if needed

The screenshot shows the Jira Software interface for the TACoin project. The left sidebar includes links for Roadmap, Backlog, Board, Code, Project pages, Design tools, Add shortcut, and Project settings. The main area displays the Backlog view for the TACoin project. At the top, there are filters for Projects, Filters, Dashboards, People, and Apps, along with a Create button and a search bar.

**Epic:**

- TAC Sprint 2** (14 Jan – 28 Jan) (5 issues)
  - [ ] As a user, I would like to own and trade TACoins and tokens to ease the exchange of money and commodities.
  - [ ] As an application developer, I would like to incorporate TACoins and tokens into my application to provide decentralized and secure software.
  - [ ] As a miner and/or trader, I would like to start a business and gain money via the exchange of TACoins and tokens.
- + Create Epic

**Backlog (7 issues):**

- [ ] TAC-4: As a token creator, I would like to create a new CCToken to mint it later on. *AS A USER, I WOULD LIKE TO OWN...* (1) AWAITING DESIGN
- [ ] TAC-7: As a token owner, I would like to mint an owned CCToken to give it to other users. *AS A USER, I WOULD LIKE TO OWN...* (1) AWAITING DESIGN
- [ ] TAC-6: As a token owner, I would like to transfer ownership of my token to another user. *AS A USER, I WOULD LIKE TO OWN...* (1) AWAITING DESIGN
- [ ] TAC-10: As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and receive TACoins and tokens programmatically to reduce development time. *AS AN APPLICATION DEVELOPER...* (1) AWAITING DESIGN
- [ ] TAC-13: As an application developer, I would like to have a public forum where I can ask questions that I cannot find an answer to it through the internet to speed up my development. *AS AN APPLICATION DEVELOPER...* (1) AWAITING DESIGN
- [ ] TAC-11: As an application developer, I would like to know how TACoin's network works through online articles to decide whether I should use it in my application. *AS AN APPLICATION DEVELOPER...* (1) AWAITING DESIGN
- [ ] TAC-12: As an application developer, I would like to have clear documentation for the protocol used for communication between nodes in the network to incorporate in my own application. *AS AN APPLICATION DEVELOPER...* (1) AWAITING DESIGN
- [ ] TAC-18: As a trader, I would like to know transfers are safe and secure so that I can buy a lot TACoins with low risk. *AS A MINER AND/OR TRADER, I W...* (1) AWAITING DESIGN
- [ ] TAC-14: As a trader, I would like blocks in the blockchain to be quickly added so that TACoin transfers are done quickly. *AS A MINER AND/OR TRADER, I W...* (1) AWAITING DESIGN
- [ ] TAC-15: As a miner and/or trader, I would like to have TACoin in a public marketplace so that I can convert my TACoins into other fiat currencies. *AS A MINER AND/OR TRADER, I W...* (1) AWAITING DESIGN
- [ ] TAC-16: As a miner, I would like to have GPU-based mining software to mine more TACoins in less time and with less power-consumption. *AS A MINER AND/OR TRADER, I W...* (1) AWAITING DESIGN
- [ ] TAC-17: As a trader, I would like to exchange TACoins and tokens directly through the blockchain network to ensure I cannot be scammed through another website. *AS A MINER AND/OR TRADER, I W...* (1) AWAITING DESIGN

+ Create issue

**Right-hand panel (Details):**

- Summary:** As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and receive TACoins and tokens programmatically to reduce development time.
- Description:** Add a description...
- Pinned fields:** Click on the *⊕* next to a field label to start pinning.
- Details:**
  - Assignee: Unassigned
  - Labels: None
  - Sprint: TAC Sprint 2
  - Story point estimate: 0
  - Reporter: uscripter
- Bottom:** Add a comment... Learn more

The screenshot shows the Jira Software interface for the TACoin project. The top navigation bar includes links for Jira Software, Your work, Projects, Filters, Dashboards, People, Apps, and Create. A search bar and various settings icons are also present.

The main area displays the Backlog for the TACoin project. On the left, a sidebar lists project settings like Roadmap, Backlog, Board, Code, Project pages, Design tools, Add shortcut, and Project settings. The backlog is organized into two sections: 'Epic' and 'Backlog'.

**Epic:** Contains one item: 'TAC Sprint 2' (14 Jan – 28 Jan) with 5 issues. These issues include:

- TAC-6: As a token creator, I would like to create a new CCToken to mint it later on. Status: Awaiting design.
- TAC-7: As a token owner, I would like to mint an owned CCToken to give it to other users. Status: Awaiting design.
- TAC-8: As a token owner, I would like to transfer ownership of my token to another user. Status: Awaiting design.
- TAC-10: As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and receive... Status: Awaiting design.
- TAC-11: As an application developer, I would like to have a public forum where I can ask questions that I cannot find an answer to ... Status: Awaiting design.

**Backlog:** Contains 7 issues. These issues include:

- TAC-11: As an application developer, I would like to know how TACoin's network works through online articles to decide whether... Status: Awaiting design.
- TAC-9: As an application developer, I would like to have clear documentation for the protocol used for communication between... Status: Awaiting design.
- TAC-13: As a trader, I would like to know how transfers are safe and secure so that I can buy a lot of TACoins with low risk. Status: Awaiting design.
- TAC-14: As a trader, I would like blocks in the blockchain to be quickly added so that TACoin transfers are done quickly. Status: Awaiting design.
- TAC-15: As a miner and/or trader, I would like to have TACoin in a public marketplace so that I can convert my TACoins into other... Status: Awaiting design.
- TAC-16: As a miner, I would like to have GPU-based mining software to mine more TACoins in less time, and with less power-consum... Status: Awaiting design.
- TAC-17: As a trader, I would like to exchange TACoins and tokens directly through the blockchain network to ensure I cannot be s... Status: Awaiting design.

On the right side, there are several floating panels: 'As an application developer...', 'Awaiting Design' (with a dropdown menu), 'Description' (with a 'Create' button highlighted in red), 'Child Issues' (with a 'Create' button highlighted in red), 'Pinned fields' (with a 'Create' button highlighted in red), 'Details' (with 'Assignee' and 'Labels' set to 'None'), and 'Labels' (with 'None').

The screenshot shows the Jira Software interface for the TACoin project. The left sidebar includes links for Roadmap, Backlog, Board, Code, Project pages, Design tools, Add shortcut, and Project settings. The main content area displays the Backlog under the 'Epic' tab. A search bar at the top right says 'Does your team need more from Jira? Get a free trial of our Standard plan.' Below it, a button says 'Create'. The backlog lists two items: 'Epic Sprint 2' (14 Jan - 28 Jan) and 'Backlog' (7 issues). The 'Epic Sprint 2' section contains five issues, all labeled 'AWAITING DESIGN':

- TAC-6 As a token creator, I would like to create a new CCToken to mint it later on. AS A USER, I WOULD LIKE TO OWN...
- TAC-7 As a token owner, I would like to mint an owned CCToken to give it to other users. AS A USER, I WOULD LIKE TO OWN...
- TAC-8 As a token owner, I would like to transfer ownership of my token to another user. AS A USER, I WOULD LIKE TO OWN...
- TAC-10 As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and rec... AS AN APPLICATION DEVELOPER...
- TAC-13 As an application developer, I would like to have a public forum where I can ask questions that I cannot find an answer to ... AS AN APPLICATION DEVELOPER...

The 'Backlog' section contains seven issues, also all labeled 'AWAITING DESIGN':

- TAC-11 As an application developer, I would like to know how TACoin's network works through online articles to decide whether ... AS AN APPLICATION DEVELOPER...
- TAC-9 As an application developer, I would like to have clear documentation for the protocol used for communication between ... AS AN APPLICATION DEVELOPER...
- TAC-18 As a trader, I would like to know how transfers are safe and secure so that I can buy a lot of TAcoins with low risk. AS A MINER AND/OR TRADER, I W...
- TAC-14 As a trader, I would like blocks in the blockchain to be quickly added so that TAcoin transfers are done quickly. AS A MINER AND/OR TRADER, I W...
- TAC-15 As a miner and/or trader, I would like to have TACoin in a public marketplace so that I can convert my TAcoins into other f... AS A MINER AND/OR TRADER, I W...
- TAC-16 As a miner, I would like to have GPU-based mining software to mine more TACoins in less time and with less power-consum... AS A MINER AND/OR TRADER, I W...
- TAC-17 As a trader, I would like to exchange TACoins and tokens directly through the blockchain network to ensure I cannot be s... AS A MINER AND/OR TRADER, I W...

At the bottom of the backlog, there are buttons for '+ Create issue' and '+ Create Epic'. To the right, there are sections for 'Awaiting Design' (with a red box around the 'Create' button), 'Child issues' (with a red box around the 'Create' button), and 'Pinned Fields' (with a red box around the 'Create' button). A sidebar on the left lists 'TACoin Software project' and various navigation tabs: Your work, Projects, Filters, Dashboards, People, Apps, and Create.

## 4. Put the sprint tasks onto a Kanban board

The screenshot shows the Jira Software interface for the TACoin project. On the left, there's a sidebar with project navigation options like Roadmap, Backlog, Board, Code, Project pages, Design tools, Add shortcut, and Project settings. The main area is titled 'Backlog' and shows an 'Epic' section with three items. Below that is a 'Backlog (7 issues)' section with 14 items. A red box highlights the 'Start sprint' button at the top right of the issue list. To the right, there's a sidebar for 'Insights' with a note about having a ready-to-use wrapper library, and another sidebar for 'Awaiting Design' with a list of issues.

**Start Sprint**

5 issues will be included in this sprint.

Sprint name \*

Duration \*

Start date \*

12/30/2021 6:12 PM

Planned start date: 1/14/2022, 7:36 AM  
A sprint's start date impacts velocity and scope in reports. [Learn more](#).

End date \*

1/13/2022 6:12 PM

Sprint goal

**Start** **Cancel**

The screenshot shows a Jira Software interface for a project named 'TACoin'. The top navigation bar includes 'Your work', 'Projects', 'Filters', 'Dashboards', 'People', 'Apps', and 'Create'. A search bar and various icons are also present. The main area displays a 'Sprint Board' titled 'TAC Sprint 2'. The board is organized into six columns: UNDER DESIGN, DONE, AWAITING IMPLEMENTATION, UNDER IMPLEMENTATION, AWAITING SECURITY AUDIT, and UNDER SECURITY AUDIT. The 'UNDER DESIGN' column contains several user stories, each with a small icon and a number in parentheses: TAC-6 (1), TAC-7 (1), TAC-8 (2), and TAC-10 (3). A message at the bottom left says 'Sprint started. We've taken you to your team's sprint board. Good luck team!' with a 'Learn more' link. At the bottom right, there is a 'Quickstart' button.

## 5. Provide screenshots of what the Kanban chart would look like on 3,5,8,12 days

This screenshot shows a Jira Kanban board for the 'TAC Sprint 2' project. The board has six columns: Awaiting Design, Under Design, Done, Awaiting Implementation, Under Implementation, Awaiting Security Audit, and Under Security Audit. There are three items in the Awaiting Design column, one item in the Under Design column, and one item in the Done column. The Awaiting Implementation and Under Implementation columns are empty. The Awaiting Security Audit and Under Security Audit columns are also empty.

Awaiting Design	Under Design	Done	Awaiting Implementation	Under Implementation	Awaiting Security Audit	Under Security Audit
As a token owner, I would like to mint an owned CCToken to give it to other users. AS A USER, I WOULD LIKE TO OWN...	As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and receive TACoins and tokens programmatically to reduce development time. AS AN APPLICATION DEVELOPER...	As a token owner, I would like to transfer ownership of my token to another user. AS A USER, I WOULD LIKE TO OWN...				
TAC-7 20	TAC-16 30	TAC-4 20				

This screenshot shows a Jira Kanban board for the 'TAC Sprint 2' project. The board has six columns: Awaiting Design, Under Design, Done, Awaiting Implementation, Under Implementation, Awaiting Security Audit, and Under Security Audit. There are three items in the Awaiting Design column, one item in the Under Design column, and one item in the Done column. The Awaiting Implementation and Under Implementation columns are empty. The Awaiting Security Audit and Under Security Audit columns are also empty.

Awaiting Design	Under Design	Done	Awaiting Implementation	Under Implementation	Awaiting Security Audit	Under Security Audit
As a token owner, I would like to mint an owned CCToken to give it to other users. AS A USER, I WOULD LIKE TO OWN...	As an application developer, I would like to have a public Forum where I can ask questions that cannot find an answer to it through the internet to speed up my development. AS AN APPLICATION DEVELOPER...	As a token owner, I would like to transfer ownership of my token to another user. AS A USER, I WOULD LIKE TO OWN...				
TAC-7 20	TAC-13 20	TAC-4 20				

This screenshot shows a Jira Kanban board for the 'TAC Sprint 2' project. The board has six columns: Awaiting Design, Under Design, Done, Awaiting Implementation, Under Implementation, Awaiting Security Audit, and Under Security Audit. There are three items in the Awaiting Design column, one item in the Under Design column, and one item in the Done column. The Awaiting Implementation and Under Implementation columns are empty. The Awaiting Security Audit and Under Security Audit columns are also empty.

Awaiting Design	Under Design	Done	Awaiting Implementation	Under Implementation	Awaiting Security Audit	Under Security Audit
As a token owner, I would like to mint an owned CCToken to give it to other users. AS A USER, I WOULD LIKE TO OWN...	As an application developer, I would like to have a ready-to-use wrapper library that enables me to view, send and receive TACoins and tokens programmatically to reduce development time. AS AN APPLICATION DEVELOPER...	As a token owner, I would like to transfer ownership of my token to another user. AS A USER, I WOULD LIKE TO OWN...				
TAC-7 20	TAC-13 20	TAC-4 20				

The screenshot shows a Jira Software board titled "TAC Sprint 2". The board is organized into six columns:

- AWAITING DESIGN**: No issues.
- UNDER DESIGN**: No issues.
- DONE 2 ISSUES ✓**: Contains two issues:
  - TAC-10**: As an application developer, I would like to have a ready-to-use API endpoint that enables me to view, send and receive TACoins and tokens programmatically to reduce development time.  
AS AN APPLICATION DEVELOPER,...
  - TAC-6**: As a token creator, I would like to create a new CCoken to mint it later on.  
AS A USER, I WOULD LIKE TO OW...
- AWAITING IMPLEMENTATION 1 ISSUE**: Contains one issue:
  - TAC-13**: As an application developer, I would like to have a public repository where I can ask questions about my token so that I cannot find someone to do it through the internet to speed up my development.  
AS AN APPLICATION DEVELOPER,...
- UNDER IMPLEMENTATION 1 ISSUE**: Contains one issue:
  - TAC-8**: As a token owner, I would like to transfer ownership of my token to another user.  
AS A USER, I WOULD LIKE TO OW...
- AWAITING SECURITY AUDIT 1 ISSUE**: Contains one issue:
  - TAC-7**: As a token owner, I would like to mint an owned CCoken to give it to other users.  
AS A USER, I WOULD LIKE TO OW...
- UNDER SECURITY AUDIT 1 ISSUE**: No issues.

The sidebar on the left shows the project navigation: "TACoin Software project", "Roadmap", "Backlog", "Board", "Code", "Project pages", "Design tools", "Add shortcut", and "Project settings".