<https://onlinepngtools.com/create-transparent-png>

Room 0 – TAG\_Intro – tagIntro.js

This appears over the character’s head at the very start of the game. It is large though so will need scaling in the JavaScript. Scale=0.5 worked okay.

assets/R0\_tutorial.png

**Welcome to AppTAG**

**Appstate’s The Accounting Game**

Move around using: a,w,s,d keys.

Interact with objects like wall panels using: e key.

Your goal is to guide our intrepid learner, Accacio (ah-kah’-shee-o), through the rooms, learning some Accounting principles and solving some problems along the way.   
**Have Fun!**

This is only wall info panel in Room 0. A scaling of 0.5 worked okay.

assets/tut1.PNG

**AppTAG: Appstate’s The Accounting Game**

Avatar Movement: A, W, S, D Help: H  
Object interaction: E Bookbag inventory: B  
Hide info popups: Q Room map: M

Some objects/activities are invisible or “locked” until you interact with other objects in the proper order. So, walk up to things and interact with the E key.

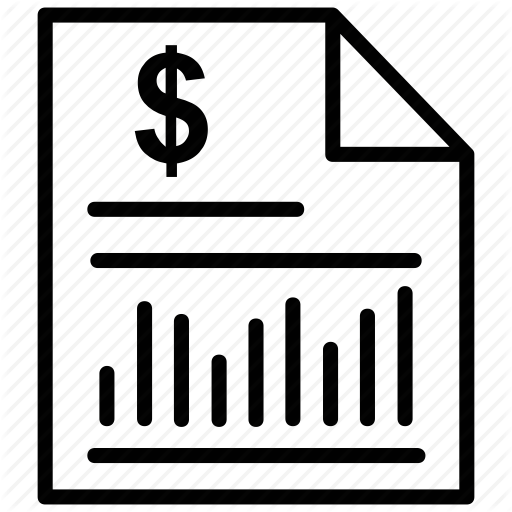
Room 1 – Course\_Fin\_Intro – courseFinancialIntro.js

“In room” activity (code in same JS file).

Panel 1-a: scaling of 0.67 worked okay.

This course is designed to help you learn the basics of bookkeeping and accounting. It is geared towards the typical college student and uses realistic examples to illustrate business concepts.

We are going to learn how to financial statements that  
to go from a stack of source are summarized for users to  
documents (invoices, receipts, understand and make good  
checks, etc.) like this: business decisions.

**Pg +**

Panel 1-b: scaling of 0.67 worked okay.

Accounting is often referred to as the “language of business.” This surprises many students who think of accounting as some kind of advanced mathematics. In reality, the math you will learn in this course is no more complicated than simple algebra. It is learning new vocabulary and the syntax of how those terms and numbers fit together that creates difficulty for many students!

For this course we will be applying the concepts of accounting to the life of a typical college student. As we go through examples, think of ways that these concepts apply to your own finances. It should make it more interesting to see how it applies directly to you.

**Pg -**

Panel 4: scaling of 0.67 worked okay.

**But what will your parents say??**

They are likely to say things like:

* Why don’t you buy it yourself?
* Where did all your money go?
* Don’t we give you an allowance?
* How much do you expect to earn the rest of the year?

How are you going to answer those questions? You would need to track your finances.

“Accounting” is the process of identifying, recording, and communicating the economic events of an organization to interested users.

Panel 6: scaling of 0.67 worked okay.

**Great Work!**

**You finished reading all of the wall panels,**

**and so unlocked the secret passage to the next room!!**

**Go to the passage hole and press E.**

Panel 2: scaling of 0.67 worked okay.

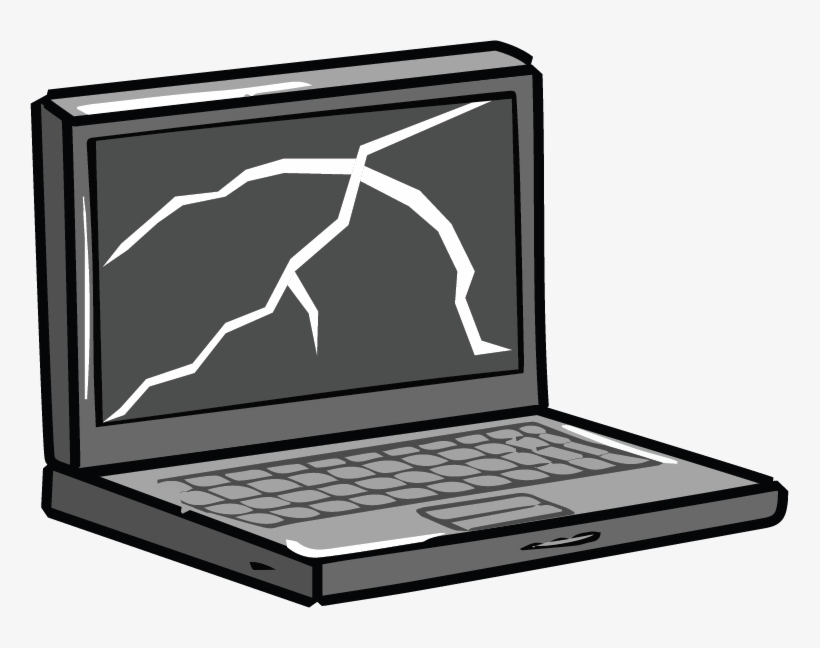
Businesses generate financial statements to allow the internal and external users to make better decisions.

Examples of internal users would be owners, management, or employees. An outside investor, a lender (bank), or other creditors (suppliers) would all be examples of external users.

For our scenario, we are the internal users, and our parents are the external users.

Panel 3-a: scaling of 0.67 worked okay.

**Let’s set the scene**

You are a typical college student… It is February and your computer just broke.   
   
  
You need a new one. What do you do? You go ask your parents to buy you a new one, of course! ;-)

How could financial statements help you?

**Pg +**

Panel 3-b: scaling of 0.67 worked okay.

**Questions**

1. Who is the internal user in our scenario?

2. Who is the external user in our scenario?

3. How could financial statements help?

**Pg -**

**Pg +**

Panel 3-c: scaling of 0.67 worked okay.

**Answers**

1. **You** are the internal user in our scenario.

2. **Your parents** the external user in our scenario.

3. Financial statements can help with the  
 communication between you and your parents.

**Pg -**

Panel 5-a: scaling of 0.67 worked okay.

**How will we answer their questions?**

Businesses and non-profit organizations communicate this data in Annual Reports. The annual report consists of the:

* Income Statement
* Statement of Retained Earnings
* Balance Sheet
* Statement of Cash Flows
* Management Discussion and Analysis
* Notes
* Auditor’s Report

**Pg +**

Panel 5-b: scaling of 0.67 worked okay.

**Question**

Which is NOT a document in our annual report?

* Income Statement
* Balance Sheet
* Statement of Cash Flows
* Revenue Sheet

**Pg -**

**Pg +**

Panel 5-c: scaling of 0.67 worked okay.

**Answer**

The “Revenue Sheet” is not a real accounting document.

Revenue is important, but it is incorporated into the other reports.

**Pg -**

Room 2 – Building\_Blocks – buildingBlocks.js

Activity Landing: BuildBlock\_Act1 (buildBlockAct1.js)

“in room” puzzle activity

BuildBlock\_Act2 (buildBlockAct2.js) is parent activity

Room 2 – FinStmtBldgBlks – finStmtBldgBlks.js

Main room with panels leads to activity “dungeon” that has 3 activities in it.

1. Sorting activity (fin statements into boxes)

2. puzzle activity (building blocks in puzzle)

3. parents activity

Activity Landing: BuildBlock\_Act1 (buildBlockAct1.js)

“in room” puzzle activity

BuildBlock\_Act2 (buildBlockAct2.js) is parent activity

Panel 1-a: scaling of 0.67 worked okay.

**How will we answer your parents’ questions??**

By using the information in the various financial statements! Earlier, you learned that the annual report consists of an Income Statement, a Statement of Retained Earnings, a Balance Sheet, and a Statement of Cash Flows.

Explore the room to find this knowledge, and unlock a secret chamber that turns the knowledge into skills.

Panel 2a: scaling of 0.5 worked okay.

**Using a financial statement like the** **Income Statement, we can**

|  |  |  |
| --- | --- | --- |
| **Accacio Accountant Income Statement Month Ending January 31, 2020** | | |
| **Revenue** | | |
|  | Service Revenue | $ 600 |
|  | Sales Revenue | 200 |
|  | Allowance Revenue | 300 |
|  | Total Revenues | $ 1,100 |
| **Expenses** | | |
|  | Food Expense | $ 100 |
|  | Coffee Expense | 20 |
|  | Rent Expense | 500 |
|  | Utility Expense | 70 |
|  | Tuition Expense | 5,000 |
|  | Depreciation Expense | 83 |
|  | Interest Expense | 13 |
|  | Meal Card Expense | 350 |
|  | Total Expenses | $ 6,136 |
| **Net Income** | | **$ (5,036)** |

**summarize our revenues and expenses for a given period of time (e.g., month, quarter, year). This is useful for determining how much money we make versus how much we spend.**

**Pg +**

**Pg -**

**Look back at the income statement to see how Accacio makes money.**

**How does he spend money? Which ways that he spends money are fixed and which are discretionary?**

Panel 3a: scaling of 0.6 worked okay. Pg

**A financial statement like the Statement of Retained Earnings, shows how much of its profits a business keeps to grow.**

|  |  |  |
| --- | --- | --- |
| **Accacio Accountant Retained Earnings Statement Month Ending January 31, 2020** | | |
|  | | |
|  | Retained earnings, 01/01/2020 | $ - |
|  | Add: Net Income | (5,036) |
|  |  | $ (5,036) |
|  | | |
|  | Less: Dividends | 50 |
|  | Retained earnings, 01/31/2020 | $ (5,086) |

**A company that retains earnings is demonstrating that they are serious about being around for the long-term.**

**Pg +**

**Look back at the statement of Retained Earnings to see if Accacio retained any of his income.**

**Looks like he paid a dividend! Of course, companies do this often; people not so much! But should he have done this? Notice that he had negative income!**

**Pg -**

Panel 4a: scaling of 0.45 worked okay.

**A Balance Sheet tells us how much money we have, versus how much we owe, at a moment in time; essentially, our net worth.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Accacio Accountant Balance Sheet Month Ending January 31, 2020** | | | |
| **Assets** | |  |  |
|  | Current Assets |  |  |
|  | Cash -Checking | $ 2,360 |  |
|  | Cash – Savings | 1,250 |  |
|  | Accounts Receivable – Joey | 50 |  |
|  | Prepaid Meal Card | 1,050 |  |
|  | Total Current Assets | $ 4,710 |  |
|  | Long-term Assets |  |  |
|  | Vehicle | 5,000 |  |
|  | Depreciation | (83) |  |
|  | Total Long-term Assets | 4,917 |  |
|  | Total Assets |  | $ 9,627 |
|  |  |  |  |
| **Liabilities** | |  |  |
|  | Current Liabilities |  |  |
|  | Interest Payable | $ 15 |  |
|  | Total Current Liabilities | 15 |  |
|  | Long-term Liabilities |  |  |
|  | Notes Payable | 5,000 |  |
|  | Student Loans Payable | 8,000 |  |
|  | Total Long-term Liabilities | 13,000 |  |
|  | Total Liabilities |  | $ 13,015 |
|  |  |  |  |
| **Stockholder’s Equity (Net Worth)** | |  |  |
|  | Owner’s Equity – Accacio | $ 1,500 |  |
|  | Owner’s Equity – Grandparents | 200 |  |
|  | Retained Earnings | (5,086) |  |
|  | Total Stockholder’s Equity | (3,386) |  |
|  |  |  | $ (6,774) |

**Pg +**

**Pg -**

**Look back at the Balance Sheet to see Accacio’s assets; how much does he have in savings?**

**Also, see what he owes on his student loan!**

Panel 5a

**The Statement of Cash Flows shows us how much cash came in and how much cash went out. It can summarize if the business is wasting cash or spending it wisely**

|  |  |  |  |
| --- | --- | --- | --- |
| **Accacio Accountant Statement of Cash Flows Month Ending January 31, 2020** | | | |
| **Cash Flows from Operating Activities** | |  |  |
|  | Cash received | $ 1,100 |  |
|  | Cash paid | (1,040) |  |
|  | Net cash operating activities | $ 60 |  |
|  |  |  |  |
| **Cash Flows from Investing Activities** | |  |  |
|  | Cash received from interest | $ 0 |  |
|  | Cash paid for new car | (5,000) |  |
|  | Net cash investing activities | (5,000) |  |
|  |  |  |  |
| **Cash Flows from Financing Activities** | |  |  |
|  | Cash received from lender | $ 5,000 |  |
|  | Cash dividends paid | (50) |  |
|  | Net cash investing activities | 4,950 |  |
|  |  |  |  |
| Net increase in cash | |  | 10 |
|  |  |  |  |
| Cash at beginning of period | |  | 105 |
| Cash at end of period | |  | $ 115 |

**Pg +**

**Pg -**

**Look back at the Statement of Cash Flows to see Accacio’s operating expenses. Nothing seems atypical.**

**We can also see that Accacio has invested in a new car!**

PANEL 6

**REVENUE, also known as income, is the money a business makes. Common forms of income are selling a product (Sales Revenue), providing a service (Service Revenue), or receiving interest payments (Interest Revenue).**

**EXPENSES are costs that are incurred during the normal course of business to generate revenue. Typical examples include things like Rent Expense, Salaries & Wages Expense, and Depreciation Expense.**

**Pg +**

**Pg -**

**Pg +**

**Pg -**

**You also learned the “Building Blocks” for those financial statements:**

* **Revenue, Expenses (Income Statement)**
* **Dividends (Statement of Retained Earnings)**
* **Assets, Liabilities, Stockholder Equity (Balance Sheet)**
* **Operational, Investing, Financing Activities (Statement of Cash Flows)**

**Pg +**

**So that’s a LOT of vocabulary!**

**You learned the basic financial statements:**

* **Income Statement**
* **Statement of Retained Earnings**
* **Balance Sheet**
* **Statement of Cash Flows**

**Pg -**

**A DIVIDEND is a distribution of a portion of a company’s earnings to the owners of the business. It can often be referred to as a “draw.”**

**There are 3 basic activities that businesses engage in: they raise money (FINANCING ACTIVITIES), they use some of that money to buy “big ticket” items (INVESTING ACTIVITIES), and they use the rest for normal operations (OPERATIONS ACTIVITIES).**

**Pg +**

**Pg -**

**ASSETS are resources owned by an individual or business that are expected to provide future economic value. Examples of assets include: Cash, Equipment, and Inventory.**

**LIABILITIES are a company’s legal debts and obligations that arise from the normal course of business. In accounting, these are often referred to as “payables” because the firm will have to “pay” the money back that it owes. Examples include: Accounts Payable, Notes Payable, and Mortgages Payable.**

**STOCKHOLDER EQUITY, also known as Owner Equity or Capital, is the owner’s rights to the assets of a business after all the liabilities are settled.**

Room2Act0 (box sorting)

**Oh No!**

Accacio has been turned into a financial statement?!

Use the R key to see parts of the document, then

sort it into the correct box.

Room2Act2 (parents questioning)

**“What did you spend all your money on?”**

**Uh Oh, The Parents!**

Remember that Accacio has a broken laptop, and that our growing accounting skills were to help him be successful in this conversation!

Go **e**ngage with the parents to get their question. Then, **e**ngage with the financial document that best provides their answer. Repeat until they are happy!

Q1 What did you spend your money on last month? Ans=IncStm

**Income Statement is CORRECT!**

**The income statement is used to assess a company’s (or individual’s) financial performance over a specific period of time. It reports where a company earns income, where it spends money, and whether it turns a profit.**

**Balance Sheet is NOT correct!**

**Good guess, but this just shows a snapshot of a company’s financial position at a moment in time. A different statement is better for seeing where money was actually spent over a time period.**

**Statement of Cash Flows is NOT correct!**

**While this does consider cash, it does not show other types of Expenses.**

**Try again!**

**Statement of Retained Earnings is NOT correct!**

**Actually, this statement is used to see how much money a company pays to its shareholders and how much it retains (saves) in the business.**

**Try again!**

**“How much cash do you have on hand?”**

**Balance Sheet is CORRECT!**

**Yes! The balance sheet will report the assets, liabilities, and equity of a company at a moment in time. Since cash is a current asset, it will be shown at the top of the balance sheet.**

**Statement of Cash Flows is NOT correct!**

**While this does consider cash, it does not show a current balance of cash available for use.**

**Try again!**

**Income Statement is NOT correct!**

**The income statement is for reporting what occurs over a given period of time. A different statement is better for taking a snapshot of a moment in time.**

**Statement of Retained Earnings is NOT correct!**

**While this statement can show how much money was kept (saved) in the business, it may not have a current balance of cash available for use.**

**“How much money did you save last month?”**

**Balance Sheet is NOT correct!**

**Not quite! The balance sheet will tell us how much cash we have on hand, but won’t necessarily tell us how much money was retained (saved) versus distributed.**

**Statement of Retained Earnings is CORRECT!**

**Yes! This statement tells us how much money was pulled out of the business (Dividends), and how much was saved or reinvested in the business (Retained Earnings).**

**Income Statement is NOT correct!**

**While the income does give us the net income, a necessary component for saving money, it does not specify how much of that income was saved.**

**Statement of Cash Flows is NOT correct!**

**This statement shows cash “flows” and money saved is not “flowing” in or out.**

**Try again!**

|  |  |
| --- | --- |
|  | **Congratulations!**  **You’ve unlocked a tunnel out of the Building Block room! Use the exit door to work your back there.** |

**Balance Sheet**

**Assets**

**---------- $ --------**

**Liabilities**

**---------- $ --------**

**---------- $ --------**

**Equity**

**---------- $ --------**

**Income Statement**

**Revenue**

**---------- $ --------**

**---------- $ --------**

**Expenses**

**---------- $ --------**

**---------- $ --------**

**Net Income $ --------**

**Cash Flows**

**Operating**

**---------- $ --------**

**---------- $ --------**

**Investment**

**---------- $ --------**

**Finance**

**---------- $ --------**

d

**Retained Earnings**

**Earnings $ --------**

**Net Income $ --------**

**Dividends $ --------**

**Earnings $ --------**

Room 3 – Account\_Eqn – accountEqn.js

Panel activity: AccountEqn\_Act (accountEqnAct.js)

Panel #1:

**Superb!**

**You’ve learned enough Accounting to get through that Q/A session with the parents!**

You know the basic financial statements and their building blocks. Now we begin to learn the process that Accounting uses to manage financial transactions and generate the financial statements.

This process is called The Accounting Cycle.

And the 1st step is “Analyze.”

Panel 2a:

assets/Room3/paperStack\_t.png

|  |  |
| --- | --- |
|  | Financial statements are based on economic events. A source document is evidence that a business transaction event took place. Some examples include a sales slip, a check, or a bill.  The first step is to “analyze” each such document to determine which building block (account) it effects. |

**Pg +**

Panel 2b

Here is a pile of receipts and transactions. Let’s begin analyzing!

Received $300 allowance from family

Receipt for $100 spent at restaurant

Financed a used car for $5000

Received $300 bi-monthly paycheck

Spent $20 at coffeeshop near campus

Received $200 cash from grandparents for birthday

Student loan for $8000 (payable after graduation)

Paid $5000 tuition bill

Sold old bicycle for $200

Lent friend $50 to be paid back next month

Paid $500 monthly rent

Paid $70 for utility bills

Withdrew $50 from ATM for entertainment

Paid $1400 for semester meal plan

**Pg +**

**Pg -**

Panel 2c:

Here is a pile of receipts and transactions. Let’s begin analyzing!

Received $300 allowance from family

Financed a used car for $5000

Spent $20 at coffeeshop near campus

Paid $500 monthly rent

Receipt for $100 spent at restaurant

Our first “receipt” is the $300 allowance check.

Think back to the financial statements and building blocks.

It could go as **“cash assets”** on balance sheet.

And also as

**“allowance revenue”** on the income statement?

Student loan for $8000 (payable after graduation)

Withdrew $50 from ATM for entertainment

Received $300 bi-monthly paycheck

Received $200 cash from grandparents for birthday

Paid $70 for utility bills

Paid $1400 for semester meal plan

Sold old bicycle for $200

**Pg -**

Paid $5000 tuition bill

Lent friend $50 to be paid back next month

**Pg +**

Panel 2d:

|  |  |  |  |
| --- | --- | --- | --- |
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|  |  |  |
| --- | --- | --- |
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| **Revenue** | | |
|  | Service Revenue | $ 600 |
|  | Sales Revenue | 200 |
|  | Allowance Revenue | 300 |
|  | Total Revenues | $ 1,100 |
| **Expenses** | | |
|  | Food Expense | $ 100 |
|  | Coffee Expense | 20 |

Room N – winners\_room – winners\_room.js

**Pg -**

**Pg +**

Panel 2e:

**What the Heck?**

How can one event document (the $300 allowance check) end fit into TWO different categories??

Welcome to the genius of

**“double entry”**

Bookkeeping!!

**Pg -**

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assets/tut1.PNG

**AppTAG: Appstate’s The Accounting Game**

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Avatar Movement: A, W, S, D Help: H  
Object interaction: E Bookbag inventory: B  
Hide info popups: Q Room map: M

Some objects/activities are “locked” until you interact with other objects in the proper order.

Building Blocks Puzzle

|  |  |  |  |
| --- | --- | --- | --- |
| Income Statement | Statement of Retained  Earnings | Balance Sheet | Statement of Cash Flows |
| Revenue |  | Assets | Operating Activities |
|  | Dividends | Liabilities | Investing Activities |
| Expenses |  | Stockholder Equity | Financing Activities |

|  |  |  |  |
| --- | --- | --- | --- |
| Income Statement | Statement of Retained  Earnings | Balance Sheet | Statement of Cash Flows |
| Revenue |  | Assets | Operating Activities |
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