End to End Tests

Invincibility Power Up (FR_INVINCIBILITY)

This test is to test that the invincibility power up makes the fire truck that picks up that power up unable to be damaged by fortresses for 1 minute.

MAN INVINCIBILITY

Open game

Close controls screen

Click start

Wait for the invincibility power up to spawn

Use a fire truck to collect the invincibility power up by driving over it

Move that fire truck into range of a fortress

If that fire truck takes no damage

Wait the rest of the minute since the power up was picked up

If that fire truck now takes damage

Pass

Else

Fail

Speed Power Up (FR_SPEED)

This test is to test that the speed power up makes the fire truck that picks up that power up moves at increased speed for 1 minute.

MAN SPEED

Open game

Close controls screen

Click start

Wait for the speed power up to spawn

Use a fire truck to collect the speed power up by driving over it

Move that fire truck

If that fire truck moves at an increased speed

Wait the rest of the minute since the power up was picked up

If that fire truck now moves regular speed

Pass

Else

Fail

Damage Power Up (FR_DAMAGE)

This test is to test that the damage power up makes the fire truck that picks up that power up deals increased damage for 1 minute.

MAN DAMAGE

Open game

Close controls screen

Click start

Wait for the damage power up to spawn

Use a fire truck to collect the damage power up by driving over it

Move that fire truck into range so it can attack a fortress

If that fire truck deals increased damage

Wait the rest of the minute since the power up was picked up

If that fire truck now deals regular damage

Pass

Else

Fail

Healing Power Up (FR_HEALTH_POWERUP)

This test is to test that the healing power up restores some lost health to the fire truck that picks it up.

MAN_HEALING

Open game

Close controls screen

Click start

Wait for the healing power up to spawn

Move a fire truck into the range of a fortress and get the fire truck damaged

Use that fire truck to collect the healing power up

If that fire truck has some health restored

Pass

Else

Fail

Refilling Power Up (FR_WATER_POWERUP, FR_SINGLE_PICKUP)

This test is to test that the refilling power up refills some lost water to the fire truck that picks it up and that a single instance of the power up can only be used once.

MAN REFILLING

Open game

Close controls screen

Click start

Wait for the refilling power up to spawn

Move a fire truck into the range of a fortress and attack with the fire truck

Use that fire truck to collect the refilling power up

If that fire truck has some water restored

Move the fire truck off the spot with the power up and then move back If the fire truck gains no more water

Pass

Fail

Difficulty Increase (FR_FORTRESS_DAMAGE_DIFFICULTY, FR_FORTRESS_UPGRADE_DIFFICULTY, FR_DIFFICULTY_EASY, FR_DIFFICULTY_MEDIUM,FR_DIFFICULTY_HARD)

This test is to test that increasing the difficulty increases the base attack of fortresses and decreases the fortress upgrade timer. This test can be repeated with any combination of difficulties to show that all difficulties work.

MAN_DIFFICULTY

Open game

Close control screen

Click start

Check upgrade timer and top right fortress Attack Points value

Return to main menu

Increase difficulty

Click start

If upgrade timer is shorter and the top right fortress' AP value is higher

Pass

Else

Fail

Save Feature (UR_SAVE)

To test that the game can be saved and resumed at any point.

MAN MAIN SAVE

Open game

Close control screen

Click start

Play game until 1 fortress is destroyed

Press the save button and select save 1

Return to main menu

Load save 1

If the game is in the same state as before

Pass

Else

Fail

MAN EXIT SAVE

Open game

Close control screen

Click start

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Play game until 1 fortress is destroyed
Press the save button and select save 1
Close game
Open game
Close control screen
Load save 1
If the game is in the same state as before
Pass
Else
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Fail

Multiple Saves (FR_MULTIPLE_SAVES)

To test that the user can save multiple distinct saves

MAN_MULTI_SAVE

Open game

Close control screen

Click start

Move truck one space

Save as save 1

Click start

Move truck 2 spaces

Save as save 2

Load save 1

If still the same as when first saved

Load save 2

If still the same as when first saved

Pass

Else

Fail