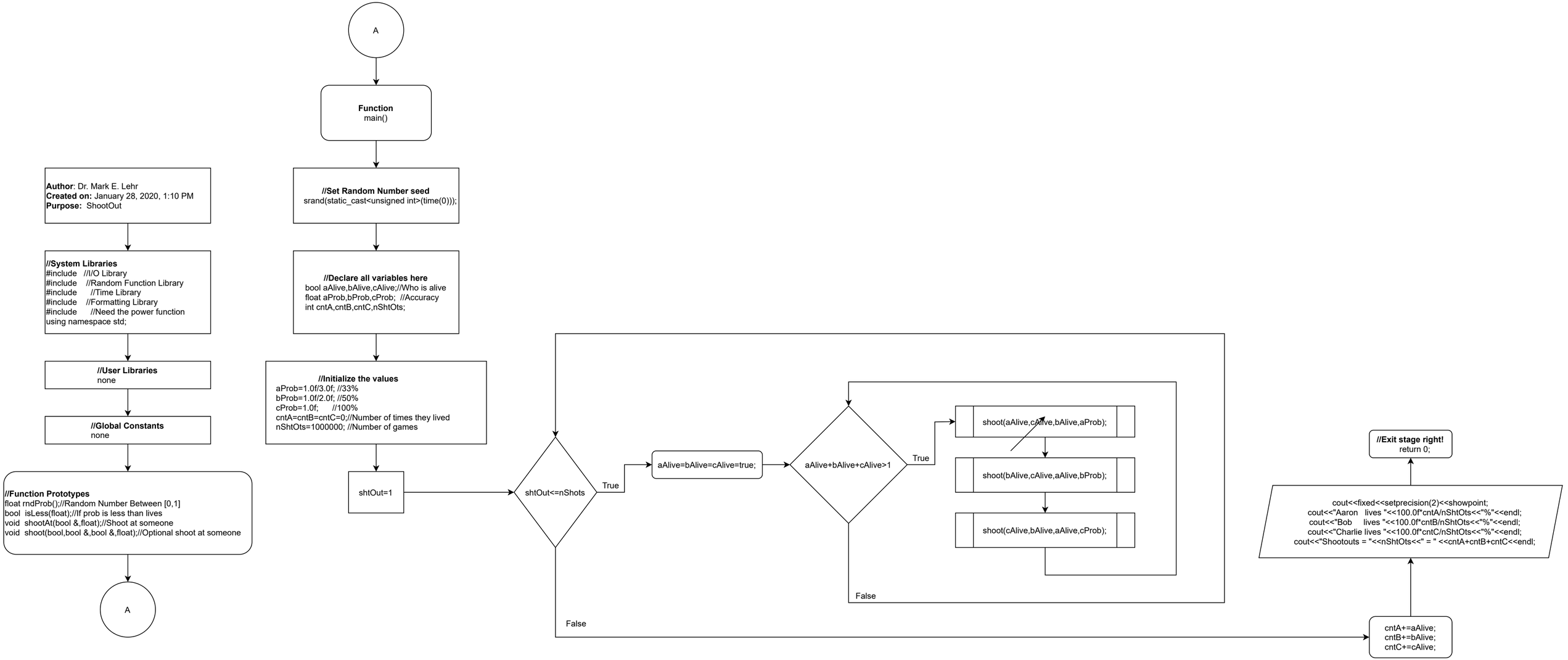
A
Function
main()
//Set Random Number seed
srand(static_cast<unsigned int>(time(0)));
//Declare all variables here
bool aAlive,bAlive,cAlive;//Who is alive
float aProb,bProb,cProb; //Accuracy
int cntA,cntB,cntC,nShtOts;
//Initialize the values
aProb=1.0f/3.0f; //33%
bProb=1.0f/2.0f; //50%
cProb=1.0f; //100%
cntA=cntB=cntC=0;//Number of times they lived
nShtOts=1000000; //Number of games
shtOut=1
shtOut<=nShots
True
aAlive=bAlive=cAlive=true;
aAlive+bAlive+cAlive>1
True
shoot(aAlive,cAlive,bAlive,aProb);
shoot(bAlive,cAlive,aAlive,bProb);
shoot(cAlive,bAlive,aAlive,cProb);
False
False
cntA+=aAlive;
cntB+=bAlive;
cntC+=cAlive;
cout<<fixed<<setprecision(2)<<showpoint;
cout<<"Aaron lives "<<100.0f*cntA/nShtOts<<"%"<<endl;
cout<<"Bob lives "<<100.0f*cntB/nShtOts<<"%"<<endl;
cout<<"Charlie lives "<<100.0f*cntC/nShtOts<<"%"<<endl;
cout<<"Shootouts = "<<nShtOts<<" = " <<cntA+cntB+cntC<<endl;
//Exit stage right!
return 0;
Author: Dr. Mark E. Lehr
Created on: January 28, 2020, 1:10 PM
Purpose: ShootOut
//System Libraries
#include //I/O Library
#include //Random Function Library
#include //Time Library
#include //Formatting Library
#include //Need the power function
using namespace std;
//User Libraries
none
//Global Constants
none
//Function Prototypes
float rndProb();//Random Number Between [0,1]
bool isLess(float);//If prob is less than lives
void shootAt(bool &,float);//Shoot at someone
void shoot(bool,bool &,bool &,float);//Optional shoot at someone
A