

PROJECT: Create a simulation video of a 270-degree, floor-to-ceiling immersive, interactive video and audio experience, as a member of a 5-person team.

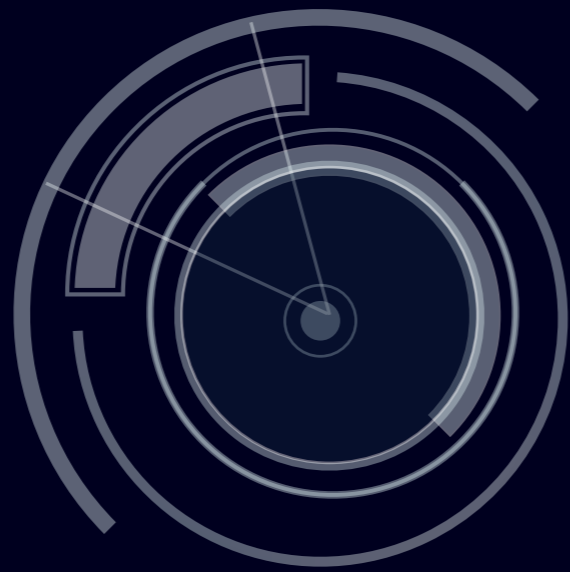
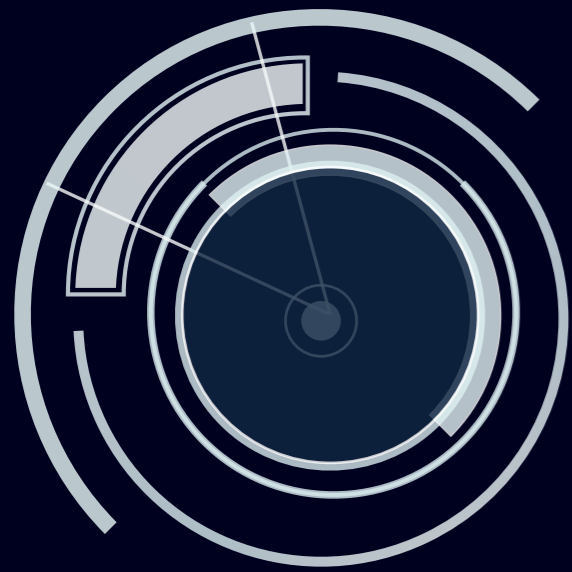
CLIENT:



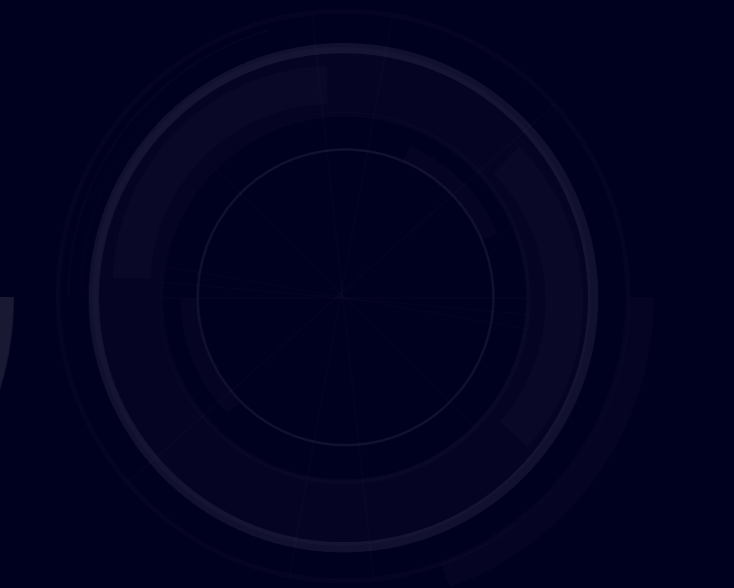
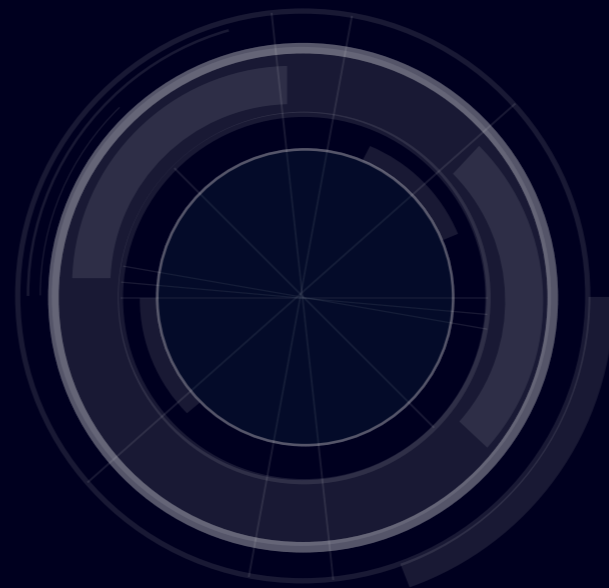
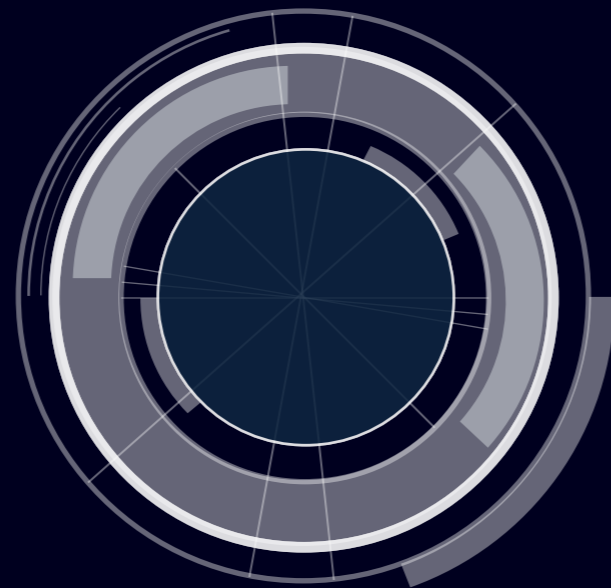
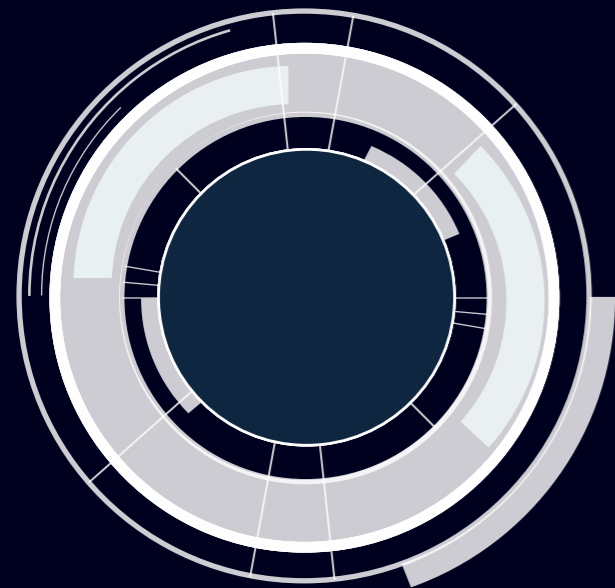
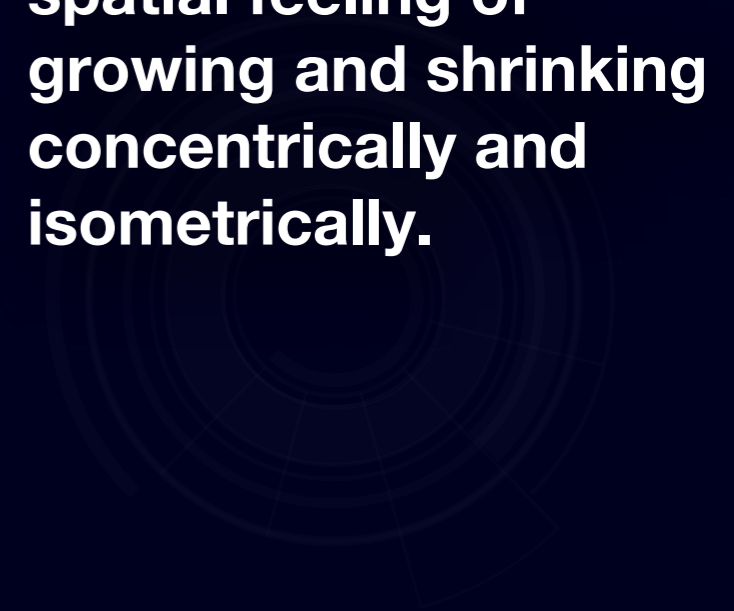
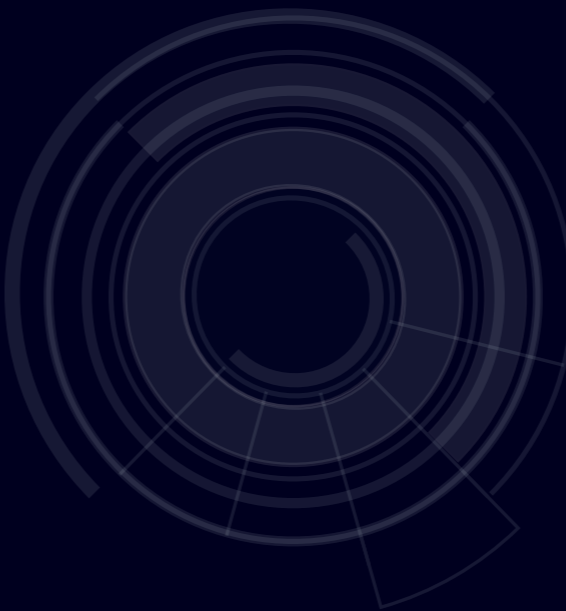
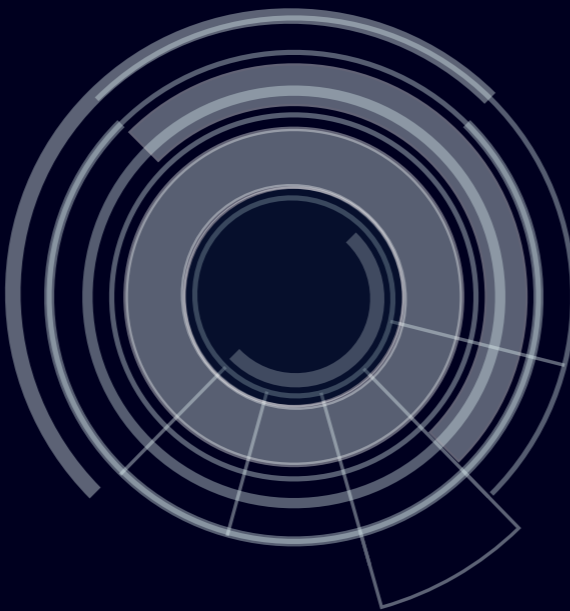
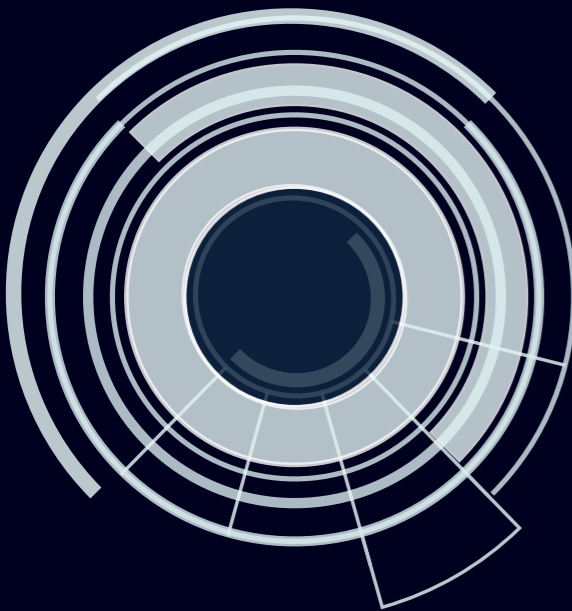
MY TOOLS: Illustrator, PhotoShop, AfterEffects

DESCRIPTION: My primary role was to create a conceptual UI, and give the UI look and feel. This project was by request from a major real estate corporation, simulating an immersion room that would deliver an incredible, positive client experience.

SLIDES: 4 plus video 480x270 640x360
<http://bit.ly/1A5qa8U> <http://bit.ly/1yQXHQ5>



My design focused on smooth, filling animations, round shapes using flat edges as gauge needles, and the spatial feeling of growing and shrinking concentrically and isometrically.

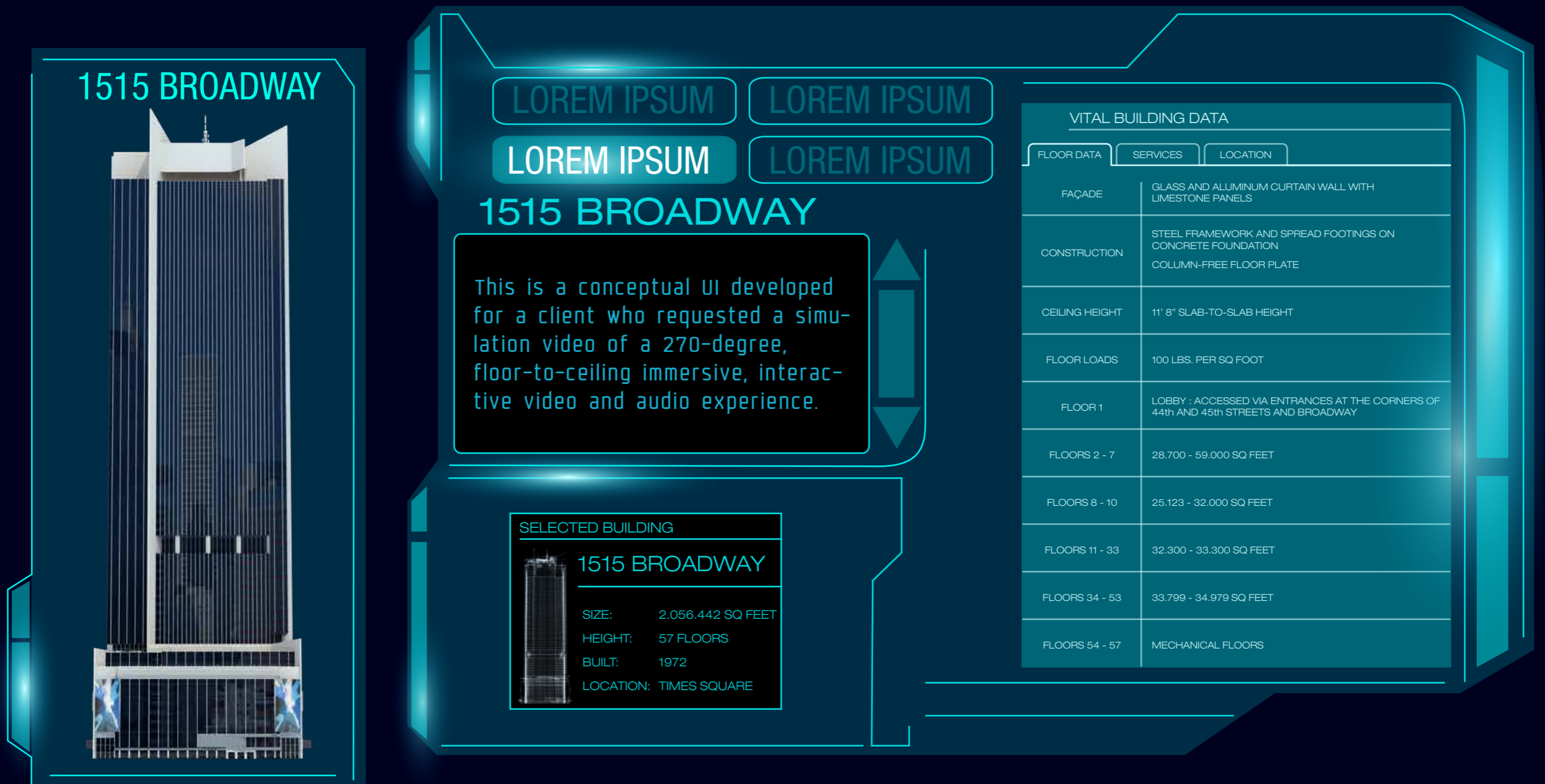


One of the most significant design requirements was to keep color and motion as subtle as possible while still directing the viewer. Motion and color are two major ways to direct user focus in immersive environments, so the design should not send false signals to the user.

We decided the project UI should feature iconic properties of the ownership. Below: MTV's headquarters in Times Square.

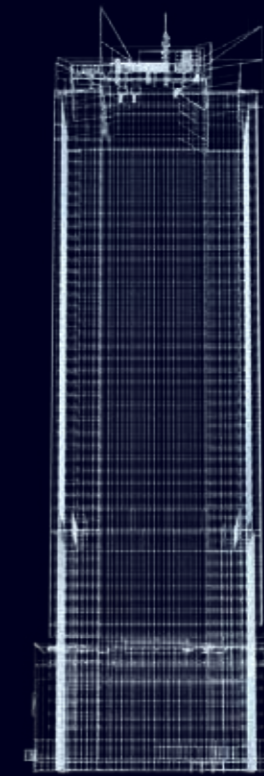
In the animation, you will see rotating wireframes of buildings where the 3D model of 1515 Broadway is pictured in these mockups.

The simulated UI borrows from the established tropes of Hollywood and the video game industry: the future is very, very Blue.





The simulation room is narrow, surpassing the edges of peripheral vision. With no horizon, any vertical motion could cause vertigo. The vertical 'striping' effect in the initial launch moment works because of this phenomenon.




Content is aligned to avoid landing on screen edge bevels.

HELVETICA
NEUE LT
PRO 53
EXTENDED

1515 BROADWAY



SELECTED BUILDING	
	1515 BROADWAY
SIZE:	2,056,442 SQ FEET
HEIGHT:	57 FLOORS
BUILT:	1972
LOCATION:	TIMES SQUARE


VITAL BUILDING DATA		
FLOOR DATA	SERVICES	LOCATION
FAÇADE	GLASS AND ALUMINUM CURTAIN WALL WITH LIMESTONE PANELS	
CONSTRUCTION	STEEL FRAMEWORK AND SPREAD FOOTINGS ON CONCRETE FOUNDATION COLUMN-FREE FLOOR PLATE	
CEILING HEIGHT	11' 8" SLAB-TO-SLAB HEIGHT	
FLOOR LOADS	100 LBS. PER SQ FOOT	
FLOOR 1	LOBBY - ACCESSED VIA ENTRANCES AT THE CORNERS OF 44th AND 45th STREETS AND BROADWAY	
FLOORS 2 - 7	28,700 - 59,000 SQ FEET	
FLOORS 8 - 10	25,123 - 32,000 SQ FEET	
FLOORS 11 - 33	32,300 - 33,300 SQ FEET	
FLOORS 34 - 53	33,799 - 34,979 SQ FEET	
FLOORS 54 - 57	MECHANICAL FLOORS	

TELECOMM



VERIZON
NEXTERA ONE

ELECTRIC CAPACITY



6 WATTS PER SQ FOOT
EXCLUDING
BUILDING HVAC

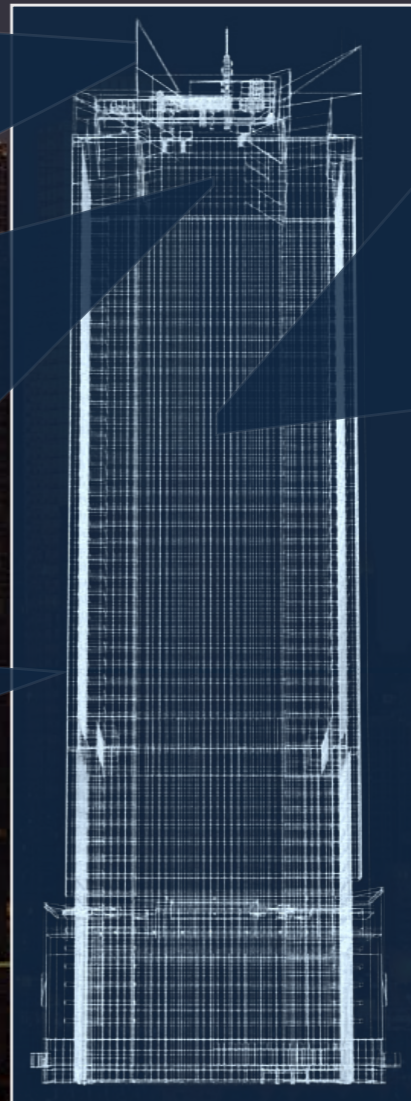
SECURITY

COORDINATED PROGRAM OF CONTROLLED ELECTRONIC ACCESS, ELECTRONIC SURVEILLANCE AND UNIFORMED SECURITY GUARDS ON A 24/7 BASIS. ELECTRONIC TURNSTILES, MESSENGER CENTER AND EXTENSIVE CCTV COVERAGE

RESTROOMS



TWO RESTROOMS ON EACH FLOOR WITH ONE A.D.A. UNISEX RESTROOM ON EACH FLOOR



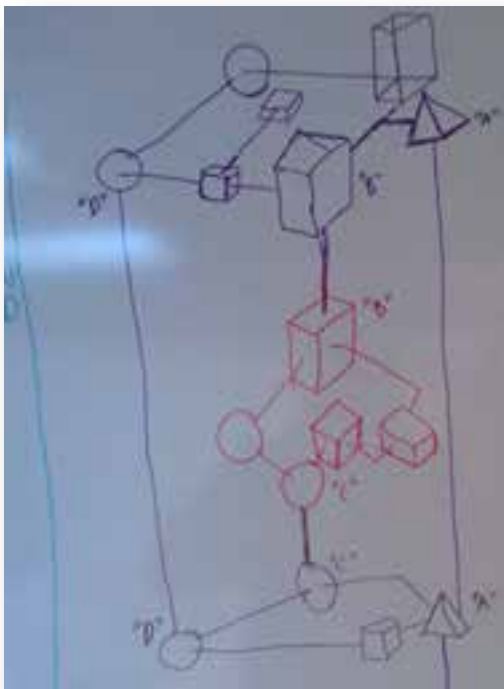
PROJECT: Create and maintain a back- and front-end distributed application to execute business logic based on data from Sales, Contracts and Nutrition teams.

CLIENT:  Institutional
Purchasing
Services

TOOLS: SQL Server
VB.NET
XML

DESCRIPTION: Tie the USDS nutritional database to specific products that generate rebates from purchasing contracts with product distributors.
User-designed front ends build menus, analyzes menu nutrition, and maximizes rebates.

SLIDES: 6



The SQL Server backend of this project consisted of 100+ tables. Data was strongly typed and branched to specific-needs queries that embraced one-to-one primary indices and joined varied many-to-one relationships, specific to the business line accessing the data.

Data was unified in query-driven User Interfaces that met specific requirements over different parts of the lifespan of the project.

Chili con Carne

Select only Primary Recipes Clones Descriptions

Maximize Form Close Database HAACP

Refresh Go to Core Menus Recipe Categories Add Nutritional Item Match Ingredients Add Index To Ingredients Add Index To Products

View Recipe Copy Recipes

View Individual Extension View Core Extensions Create Ingredient

Makes: 50 Update

Ingredients

Beef, stew meat, 1/2 inch dice	8	lbs.
Water	1	gallon(s)
Base, beef	1	cup(s)
Peppers, green, fresh, diced	2	quart(s)
Onions, fresh, diced	1	quart(s)
Tomatoes, canned, diced	2	quart(s)
Chilis, green, canned, chopped	2	cup(s)
Beans, kidney, canned, drained	2	quart(s)
Garlic, fresh, minced	2	Tbsp.
Cumin	2	Tbsp.
Oregano	1	Tbsp.

Refresh

STDPORTION 1 serving

"Chili with meat"
Tender beef cubes, beans, green chilies, onions and tomatoes slowly simmered into a tasty stew.

Clones

648 Southwest Chili
1230 Chili

10 In heavy soup pot, tilting skillet or steam jacket kettle cook beef with onions for 15-20 m
20 Add water and base. Mix well to dissolve.
30 Cover and simmer 1 hour until tender.
40 Add vegetables and seasonings. Cover and simmer an additional 30-40 minutes until ve
50 Transfer to 4-inch hotel pan for service.

Add to Primary Recipe list Add to Clone Recipe list

Delete from Primary Recipe List Delete from Clone Recipe list

User Interfaces were directed and largely designed by the specific end-users, and were not project requirement.

Project requirements specified compliance with many legal oversight procedures and entities, such as the HACCP, pictured right. This interface is drawing generic strings that hold a many-to-one relationship with actual products, and attaches logical relationships that determine health warnings.

HACCP warnings

Heat product to an internal temperature of 165 degrees for a minimum of 15 seconds. Hold product at or above 140 degrees. When cooling product, internal temperature needs to reach 70 degrees or lower within 2 hours, and 40 degrees or lower within 1 hour.

Ingredient Type

Poultry/ Casserole

- Assorted Muffins
- Assorted Pastries
- Assorted Relishes
- Assorted Sorbet
- Bagels
- Banana Bread
- Banana Cream pie
- Banana Finger
- Banana Split
- Bananas Foster
- Belgian Waffles
- Berry Medley
- Berry Pie
- Berry Pie a la Mode
- Black Bottom Pie
- Black Forest Cake
- Blueberry Crepes
- Blueberry Crisp

- Apple Almond Chicken
- Avgolemono Soup
- Baked Chicken
- Baked Chicken Breast
- Baked Chicken Breast with Vegetabl
- Baked Chicken with Vegetable Sauc
- Baked Potato Soup
- BBQ Chicken
- Beef Burrito
- Beef Enchilada Bake
- Beef Pot Pie
- Beef Ravioli
- Bessie's Famous
- Black Bean Burger
- Breaded Turkey Cutlet
- Broccoli and Cheese Casserole
- Butternut Squash Soup
- Cabbage Rolls

Exit Recipe Categories

Category

Sandwiches

Search

Search

B.L.T.	▼	Sandwiches	▼	Cold	▼
▶ BBQ Beef on an Onion Bun	▼	Sandwiches	▼	Hot	▼
Black Bean Burger	▼	Sandwiches	▼	Hot	▼
California Hoagie	▼	Sandwiches	▼	Cold	▼
Cheeseburger on a Roll	▼	Sandwiches	▼	Hot	▼
Chicken Burger	▼	Sandwiches	▼	Hot	▼
Chicken Cheesesteak Sandwich	▼	Sandwiches	▼	Hot	▼
Chicken Salad on a Croissant	▼	Sandwiches	▼	Cold	▼
Chicken Salad Sandwich	▼	Sandwiches	▼	Cold	▼
Chicken Salad Sandwich on Raisin Bread	▼	Sandwiches	▼	Cold	▼
Club Sandwich	▼	Sandwiches	▼	Cold	▼
Cobb Sandwich	▼	Sandwiches	▼	Cold	▼
Crab Salad on Croissant	▼	Sandwiches	▼	Cold	▼
Deli Loaf Sandwich	▼	Sandwiches	▼	Cold	▼
Deli Sandwich	▼	Sandwiches	▼	Cold	▼
Deli Wrap	▼	Sandwiches	▼	Cold	▼
Dilled Salmon Salad Sandwich	▼	Sandwiches	▼	Cold	▼
Egg Salad Sandwich	▼	Sandwiches	▼	Cold	▼

One of the many product outputs of the project allowed generic categories to be used in early menu construction by chefs and dieticians. Lookups allowed menus to be built without specifying specific products.

Apple Brie Omelet

Select only Primary Recipes Clones Descriptions

Maximize Form Close Database

HAACP

Refresh Go to Core Menus Recipe Categories Add Nutritional Item Match Ingredients Add Index To Ingredients Add Index To Products

View Individual Extension View Core Extensions Create Ingredient Makes: 64 Update

Apple Brie Omelet

Extension is Approved: Find Unapproved

Extension is Approved by: mkr

Portions:

Quantity Unit

Standard 1 serving(s)

Small 1/2 serving(s)

Large 1 1/2 serving(s)

Utensil:

spatula

Vegetarian

x

Mechanical Soft

x

Advanced Dysphagia

x

Dysphagia Mechanical

with finely chopped apples + 1 oz cheese sauce

Puree

puree

Finger

bsp

3-4 gram Sodium

x

2 gram Sodium

LS cheese

Renal

w no cheese

Low Fat and Low Cholesterol

with LF/LC eggs

Classic French breakfast of eggs over sautéed apples and melted brie.

As products vary by manufacturer, every recipe was approved by a licensed dietician. Logic reversed approval status when a product was altered.

Ingredients

Fruit, fresh fruit in season

Gravy, gingersnap, prepared

Juice, assorted

Peaches, juice pack, drained

Savory stuffing, prepared

Shrimp, p&d, 21-16, tail off

Index

Jelly, Currant

Jelly, Diet, PC

Jelly, Orange Marmalade, Regular, Bulk

Juice, Apple, Canned, PC

Juice, Apple, Honey Thick

Juice, Apple, Nectar Thick

Juice, Apple, Sparkling

Juice, Base, Apple 4/1

Juice, Base, Apple, BIB

Juice, Base, Apple, Frozen

juice, Base, Cranberry, 4/1

Juice, Base, Cranberry, BIB

Add Index Item

Specific product vendors change their product lists on a monthly basis, as distributors establish lowest-cost equivalencies. These changes are tied to specific nutritional entries.

The SQL backend drew on hundreds of tables from many different sources. Queries were in place to relate varied data types into uniform, strongly-typed data that was processed by logic functions. Here, some data is obscured to protect client-vendor contracts.

Below is an example of the type of query result critical to the business logic of the project. The ultimate goal of the project was to marry real products with dietician-approved menus.

Table List

Table Name	Type	Date Created	Date Modified	Keys
tblCoreMenus	TABLE			PrimaryKey
tblDayName	TABLE			PrimaryKey
tblDayNumber	TABLE			PrimaryKey
tblDescriptivePhrase	TABLE			
tblDistributorName	TABLE			PrimaryKey
tblExtension	TABLE			iRecipeNameID
tblFacilityCustomOption	TABLE			PrimaryKey
tblFacilityName	TABLE			PrimaryKey
tblFacilityRegionAndTier	TABLE			PrimaryKey
tblFinalReportOutput	TABLE			PrimaryKey
tblHAACPtoPrimary	TABLE			PrimaryKey
tblHAACPwarning	TABLE			PrimaryKey
tblIndex	TABLE			PrimaryKey
tblIndexCategory	TABLE			PrimaryKey
tblIndexCategoryName	TABLE			PrimaryKey
tblIndexPackSize	TABLE			PrimaryKey
tblIndexRefuse	TABLE			PrimaryKey
tblIndexStandardItem	TABLE			PrimaryKey
tblIndexToIngredient	TABLE			PrimaryKey
tblIndexToProduct	TABLE			PrimaryKey
tblIngredientName	TABLE			PrimaryKey
tblIngredientsToNutrition	TABLE			PrimaryKey
tblManufacturerName	TABLE			PrimaryKey
tblMealName	TABLE			PrimaryKey
tblMealNumber	TABLE			PrimaryKey
tblMenuExtension	TABLE			PrimaryKey
tblNDBVolumeMassAndSp...	TABLE			PrimaryKey
tblNumbersByName	TABLE			
tblNutritionIPS2	TABLE			
tblNutritionUnit	TABLE			PrimaryKey
tblPaperSize	TABLE			PrimaryKey

iIngre	strIngredientName	iIndexID	strIndex	iProduct	strProduct	iDistributor	strDistributorName	strBrandName	varPackSize
443	Margarine	458	Margarine, Cubes, Bulk	15556	MARGARINE SPRD POR	2	FSA Kent	PROMISE	600/5GM
443	Margarine	458	Margarine, Cubes, Bulk	15557	MARGARINE SPRD POR	3	FSA Portland	PROMISE	600/5GM
443	Margarine	458	Margarine, Cubes, Bulk	15558	MARGARINE SPRD POR	1	FSA Spokane	PROMISE	600/5GM
443	Margarine	458	Margarine, Cubes, Bulk	16089	MARGARINE SPREAD L	3	FSA Portland	PROMISE	6/3.5#
443	Margarine	458	Margarine, Cubes, Bulk	16928	Margarine Spread Cup	7	SYSCO Kent	PROMISE	600/5 GM
443	Margarine	458	Margarine, Cubes, Bulk	17102	Margarine Spread 610 Tub	7	SYSCO Kent	PROMISE	6/3.5 LB
443	Margarine	458	Margarine, Cubes, Bulk	17166	Margarine/Btr Whipped 60/40	7	SYSCO Kent	GLDNSWT	1/20 LB

Queries drew from the USDA nutrition database, vendor product data, menu and dietary data, and created nutrient data on a per-recipe basis that used best-quality-for-price logic.

The data is available to end clients, who are required to produce nutritional and dietary data specific to individuals on demand, and who must record tracking data per individual by law.

ItemID	iNDBid	strNutritionItemName	dblGramWeight	iNu	dblKCAL	dblFAT	dblPRO	dblSFA	dblCHO	dblDFIB	dblCHOL	dblA	dblC	dblB1	dblB2	dblB12	dblE	dblNa	dblK	dblCa	dblP
5901	23510	Pesto Sauce prepared	57	0	157		7.4	0	2.2	0	14	627		0.03	0.17	0	0	245	131	165	0
5902	23511	Pork sausage link	13	0	48		2.6	1.4	0.1	0	11	0		0.1	0.03	0.22	0	168	47	4	24
5903	23512	Sweet Potato, baked w skin	114	0	117		2	0	27.7	3.4	0	24877		0.08	0.14	0	0	11	397	32	63
5904	23541	Clam Juice liquid	240	0	5		1	0	0.2	0	7	72		0.02	0.05	12	0	516	358	31	274
5905	23542	Corn dog cooked oven ready	175	0	460		16.8	5.2	55.8	0	79	207		0.28	0.7	0.44	0	973	263	102	166
5906	25343	Cornish Game Hen - Half - with skin	114	0	296		25.4	5.8	0	0	149	121		0.08	0.23	0.32	0	73	179	15	166
5907	25344	Cornish Game Hen -HALF - without skin	110	0	147		25.6	1.1	0	0	117	72		0.08	0.25	0.33	0	69	275	14	164
5908	25345	cranberries	95	0	47		0.4	0	12	4	0	44		0.03	0.02	0	0	1	67	7	9
5909	25346	Cream of Tartar	3	0	8		0	0	1.8	0	0	0		0	0	0	0	2	495	0	0
5910	25347	Salad Dressing Caesar	29	0	140		1	2.5	1	0	10	0		0	0	0	0	300	10	20	0
5911	25355	Guacamole,STDPORION PER PKG	21	0	36		0.4	0.7	2	1.4	0	0		0.01	0.02	0.18	0	144	94	4	8
5912	25356	Corned Beef Hash canned	252	0	470		21	16	25	8	90	0		0	0	0	0	1200	0	20	0
5913	25357	Meatloaf beef prepared	85	0	155		14.5	0	6.5	0	44	68		0.09	0.17	0	0	578	204	20	0
5914	25358	Vegetable oil Canola	14	0	122		0	1	0	0	0	0		0	0	0	0	0	0	0	0
5915	25359	Veal Parmigiana with 4 oz tomato sce,l	113	0	230		9	4	19	2	20	200		0	0	0	0	740	0	40	0
5916	25360	Garbonzo beans - chickpeas	164	0	269		14.5	4	45	12.5	0	44		0.19	0.1	0	0	11	477	80	276
5917	25361	Chop Suey vegetables - canned	63	0	10		8	0	2.3	1	0	0		0	0	0	0	241	0	37	0
5918	23513	Tater Tots potatoes	85	0	146		1.8	1.2	19.8	0	0	0		0.06	0.01	0	0	401	258	0	0
5919	23514	Ravioli Beef - Windsor	172	0	280		14	4	38	1	75	200		0	0	0	0	480	350	100	0
5920	23515	Caramel Sauce prepared	41	0	120		0	0	28	0	0	0		0	0	0	0	90	90	60	0
5921	23516	Seasoning Salt	1.2	0	0		0	0	0	0	0	0		0	0	0	0	380	0	0	0
5922	23517	Taco Seasoning	5	0	15		0	0	3	0	0	0		0	0	0	0	300	0	0	0
5923	23518	Tortellini cheese	140	0	250		12	1.5	36	1	30	200		0	0	0	0	290	175	200	0
5924	23519	Tartar sauce	30	0	100		0	4	4	0	10	0		0	0	0	0	180	10	0	0
5925	23527	Blintz	50	0	110		5	2	10	0	40	100		0	0	0	0	150	0	20	0
5926	23528	Breadsticks Parmesan herb	28	0	100		3	3	11	0	10	200		0	0	0	0	100	0	40	0
5927	23529	Chicken Cordon Bleu	180	0	350		37	5	20	0	95	200		0	0	0	0	1510	0	150	0
5928	23530	Crepes, 6 INCH	14	0	30		1	0	5	0	5	0		0	0	0	0	35	0	0	0
5929	23531	Cabbage rolls	218	0	218		11.3	0	19.8	0	26	0		0.13	0.15	0	0	1170	371	120	0
5930	23532	Italian Blend Vegetables	84	0	30		1	0	5	2	0	1250		0	0	0	0	30	0	20	0
5931	23533	Yam Patties,PIECE	113	0	150		1	0	33	3	0	4000		0	0	0	0	200	0	40	0

PROJECT: Create a sleep and wake clock for pre-literate children that runs on mobile platforms (Android and iOS)

CLIENT: [self]

TOOLS: Eclipse / Flash Builder
Java / ActionScript 3.0
Flash Professional

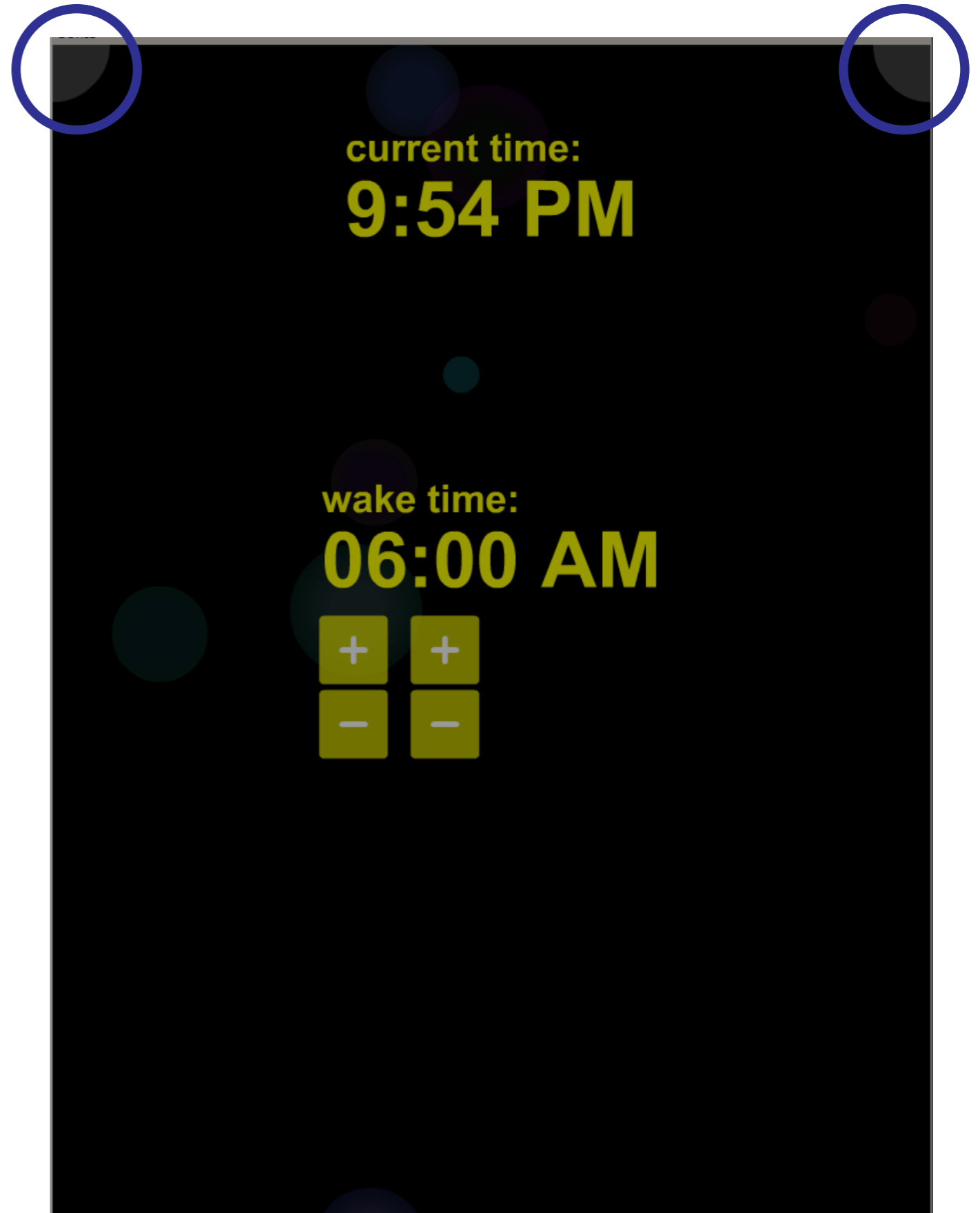
DESCRIPTION: Very young children often awake before parents. They can not read clocks, so can not determine whether the current time is an acceptable wake time. This clock uses color to indicate time and proximity to wake time, and provides relaxing visuals.

SLIDES: 5

The application launches and renders out the slowly-sliding semi-transparent circles. The 'bubbles' drift slowly across the screen, at random speeds, colors, directions and transparency. The bubbles change color as the Wake Time approaches, and when it is reached.

The top-left and top right corners (circled in purple) hold static semi-circles that are actually buttons. They are camouflaged, because toddlers also understand how touchscreens work, and will push any button that is obviously a button.

Top-left spawns and destroys the time/wake interface. Top-right quits the application.



Every screen touch adds one bubble to the background. Bubbles can be added by touching anywhere on the interface. The code structure that permits this involves having the entire interface held in a single object, with a listener assigned to the container object.

```
private function onInit():void
{
    NativeApplication.nativeApplication.systemIdleMode = SystemIdleMode.KEEP_AWAKE;
    Multitouch.inputMode=MultitouchInputMode.TOUCH_POINT;

    addBackground();

    for(var i:int=0; i<numberOfBalls;i++){
        addBouncingBall();
    }

    setChildIndex(bg, numChildren - 1);

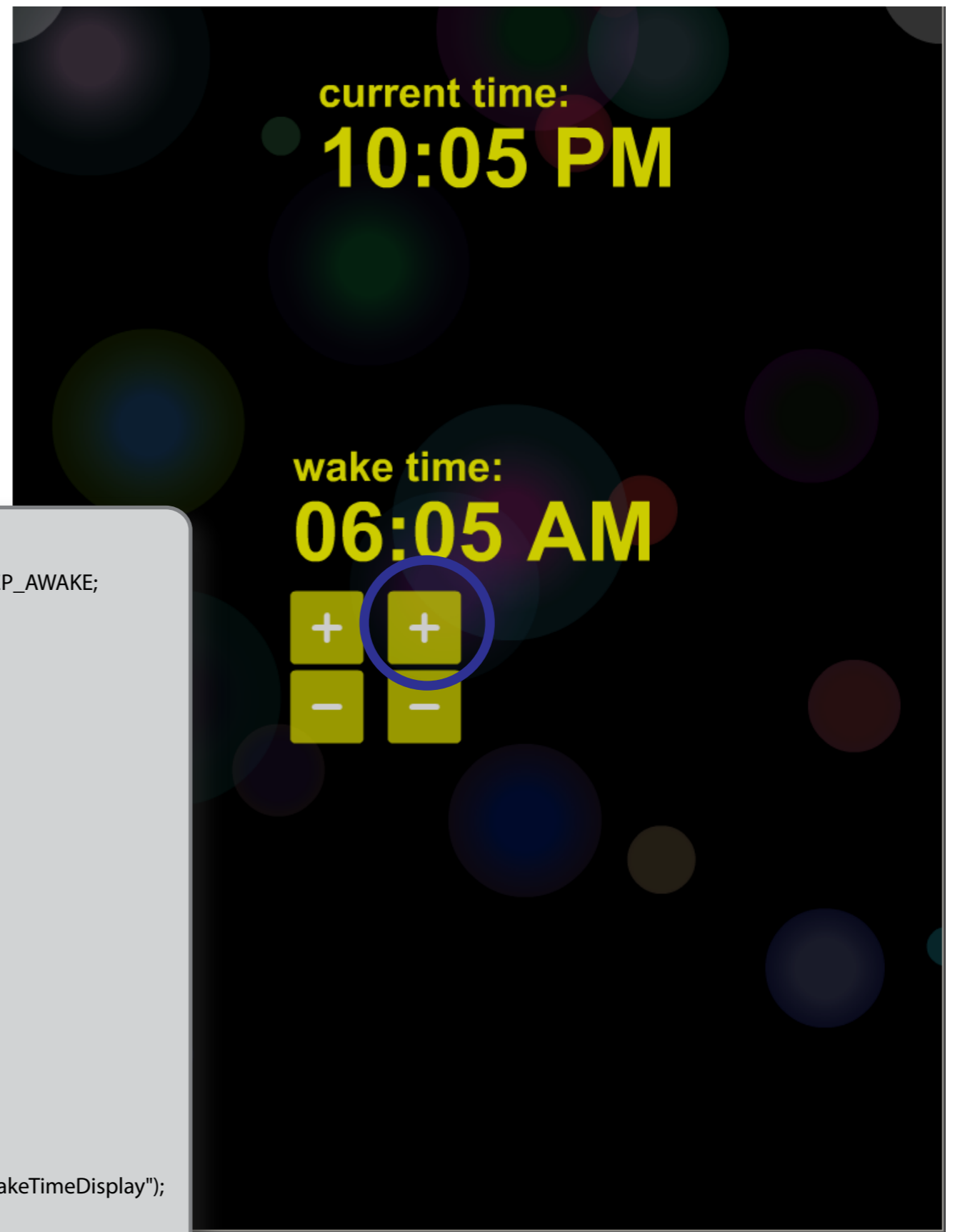
    btnCurrentTime = new TimeDisplayButton();
    btnCurrentTime.clock = this;
    btnCurrentTime.addTimeDisplay();
    bg.addChild(btnCurrentTime);

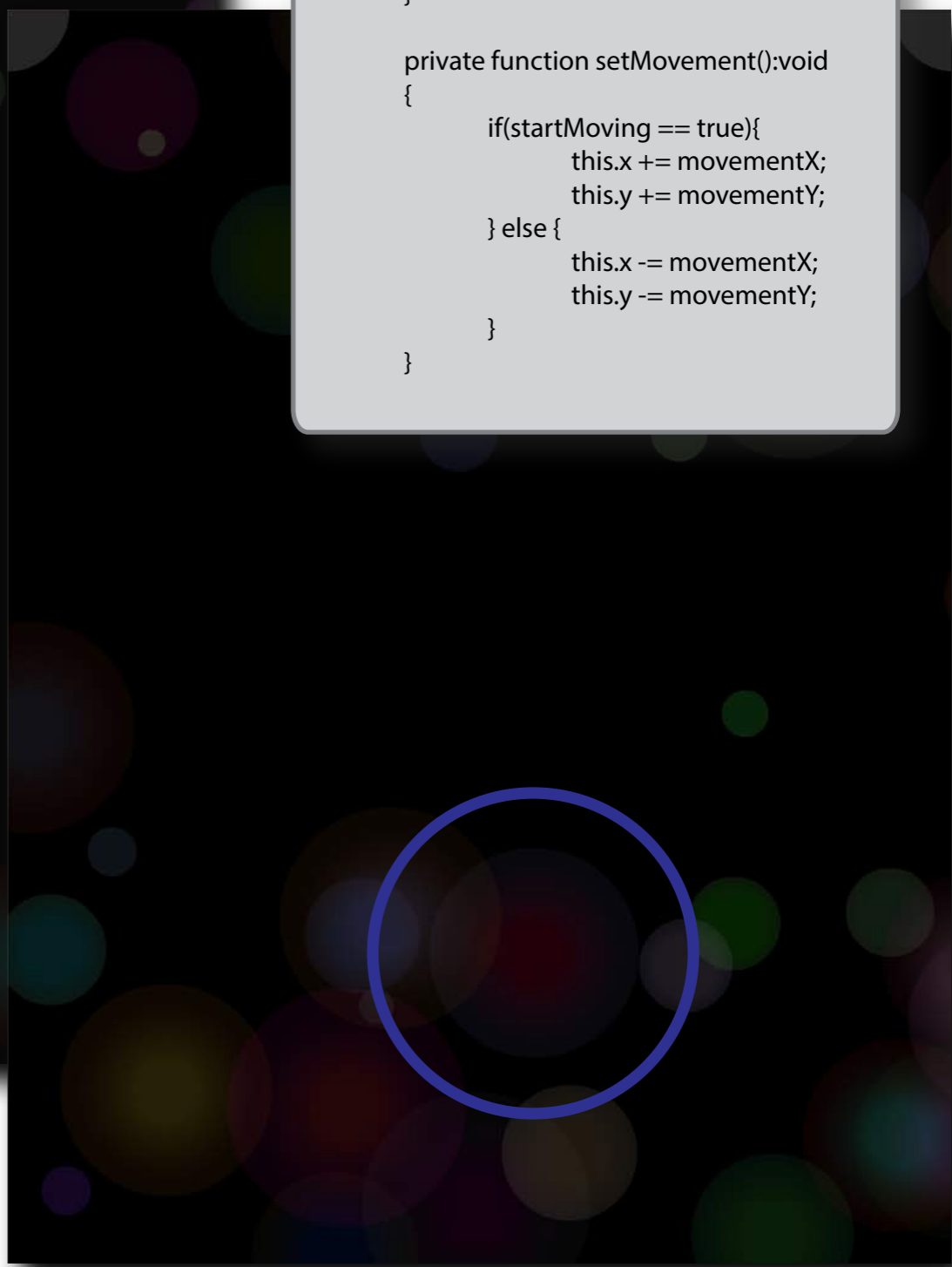
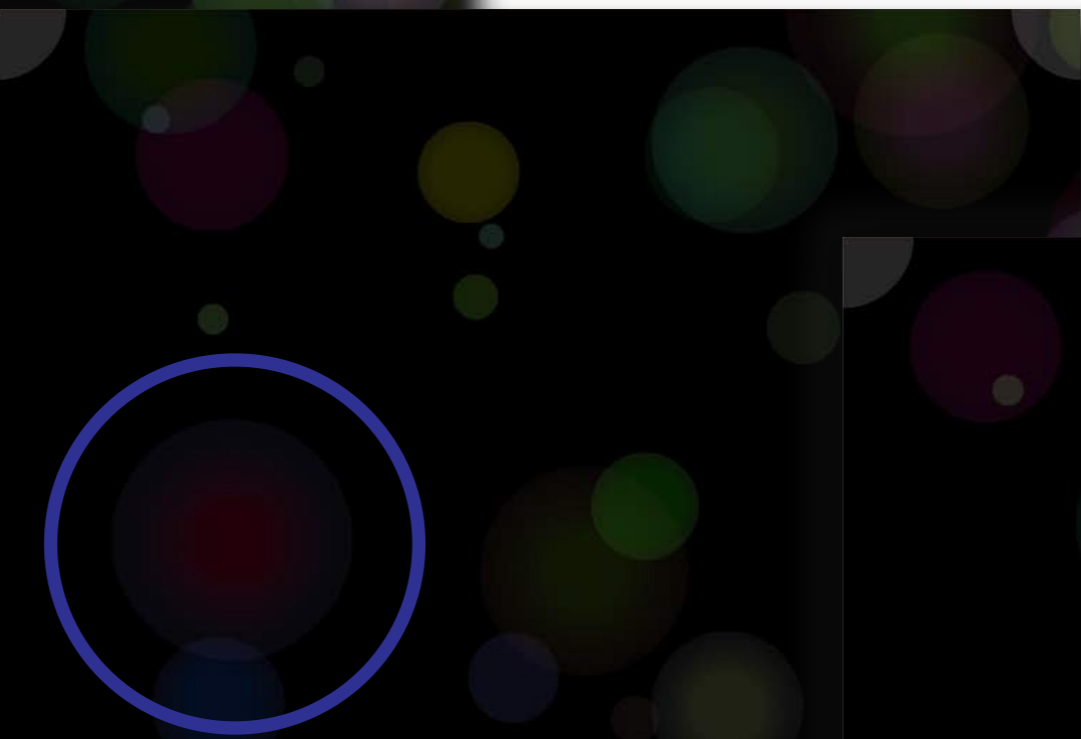
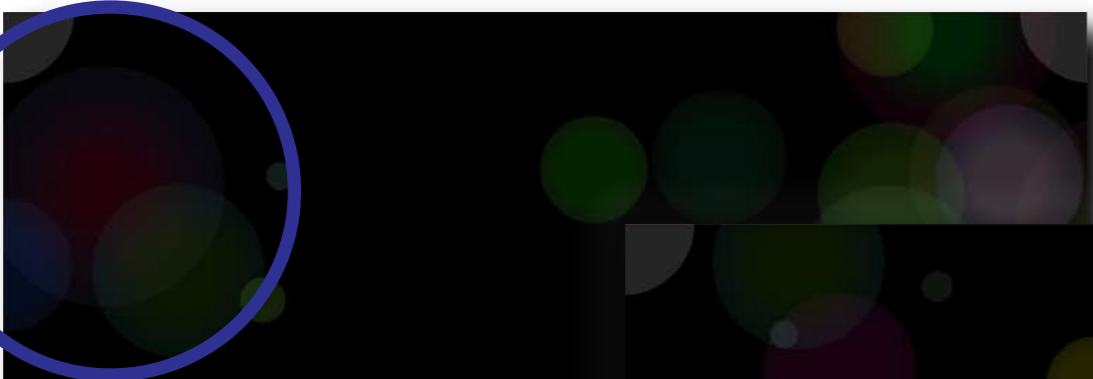
    btnExit = new ExitButton();
    btnExit.x = stage.stageWidth;
    bg.addChild(btnExit);

    bg.addEventListener(MouseEvent.CLICK, addBouncingBall_event);

    wakeTimeDisplay = addWakeTimeDisplayWithControls(wakeTimeDisplay, "wakeTimeDisplay");

    startTimer();
}
```





```
public class BouncingBall extends Sprite
{
    private var ball:Sprite = new Sprite;
    private var startMoving:Boolean = false;
    private var movementX:Number = 1;
    private var movementY:Number = 1;

    private function main(event:Event):void{
        setMovement();
        bounceWalls();
    }

    private function setMovement():void
    {
        if(startMoving == true){
            this.x += movementX;
            this.y += movementY;
        } else {
            this.x -= movementX;
            this.y -= movementY;
        }
    }
}
```

```
private function bounceWalls():void
{
    if(this.x < 0 || this.y < 0){
        getXAndY();
        startMoving = true;
    }
    if( this.x > clock.bg.width || this.y > 0 + clock.bg.height ){
        getXAndY();
        startMoving = false;
    }
}
```


The clock works by changing colors as the wake time approaches. Toddlers may not read numeric clocks, but they understand color as a symbol and can assign meaning: Not Yet / Soon / Wake.

30+ minutes from wake: multicolor
30 to 5 minutes before wake: blue tint
5 to 0 minutes before wake: red tint
Wake Time: yellow tint



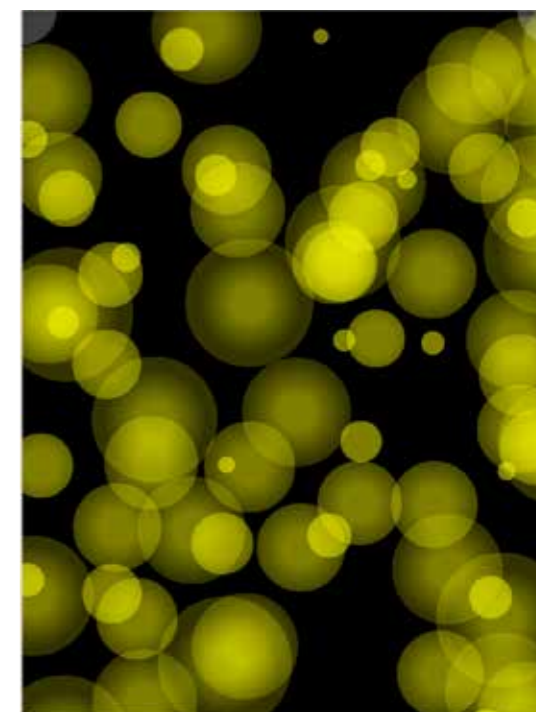
> 30 min



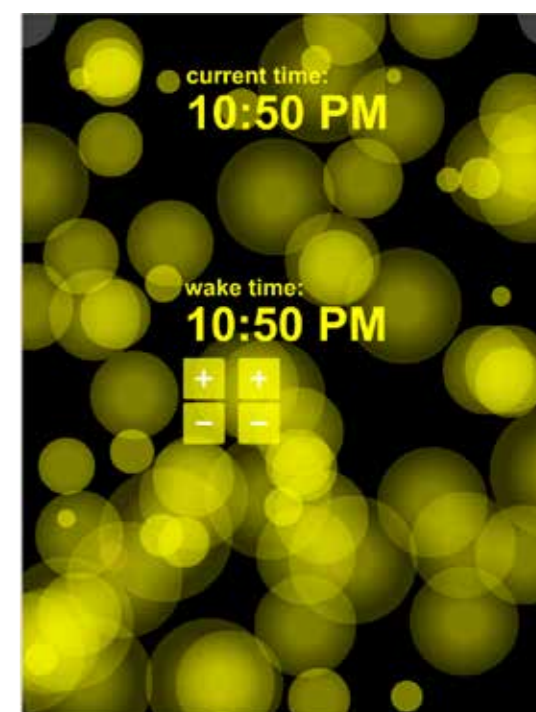
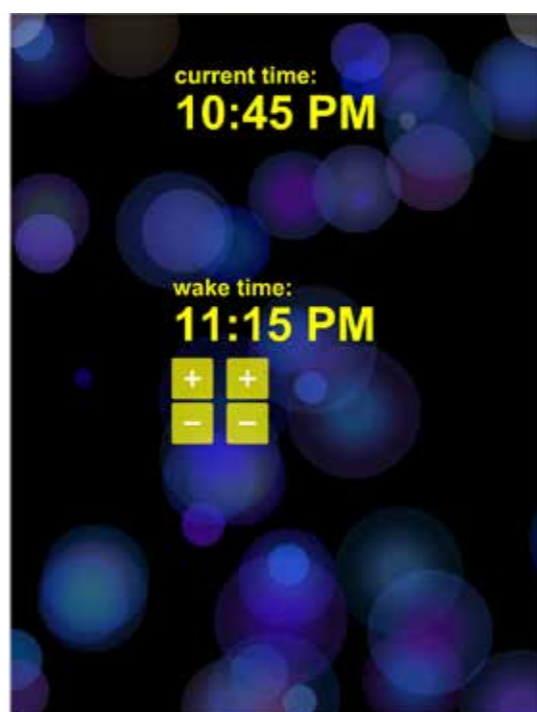
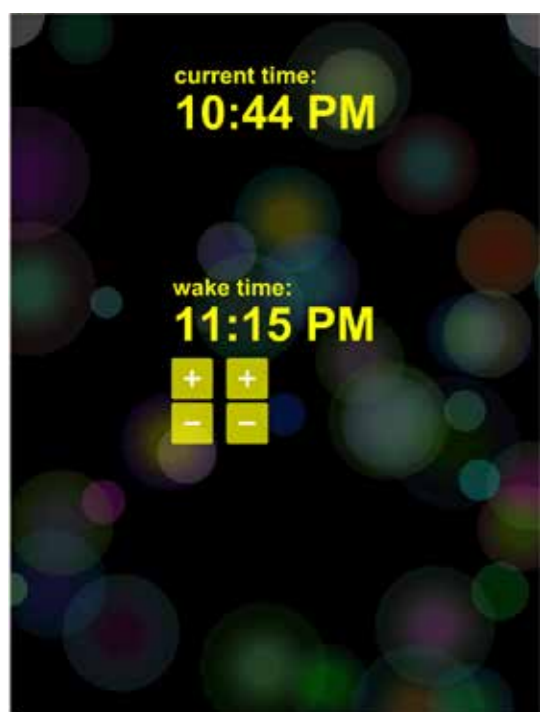
30 to 5 min



5 to 0 min



0 min : wake



```

public function checkAlarm():void
{
    if(this.alarmOn == true){

        var diff:Number = timeWake.getTime() - timeNow.getTime();
        var i:int;

        if( diff < 30*60*1000 && diff > 5*60*1000){
            // 30 min * 60 sec * 1000 ms
            for( i=0;i<numChildren;i++){
                if(getChildAt(i) is BouncingBall){
                    tintColor(getChildAt(i) as Sprite, 0x0000FF, 0.5);
                }
            }
        }

        if( diff < 5*60*1000 && diff > 0){
            // 5 min * 60 sec * 1000 ms

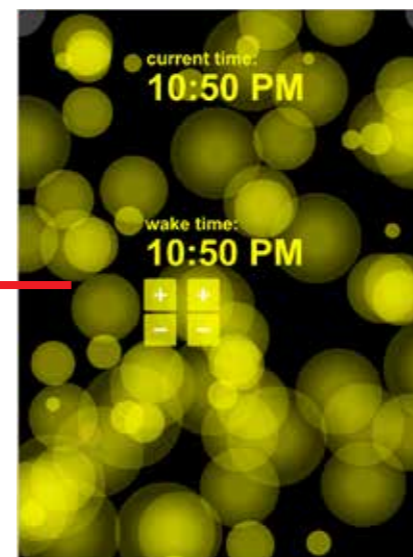
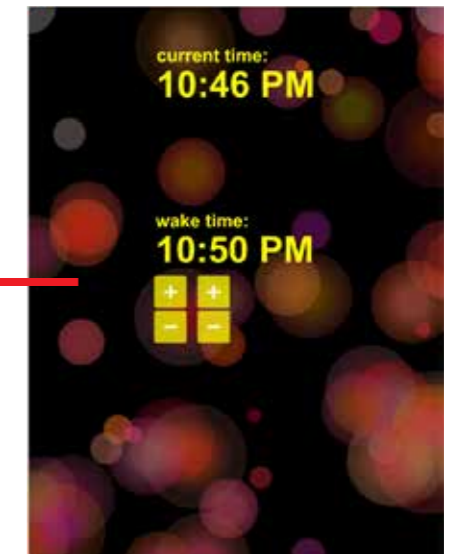
            for( i=0;i<numChildren;i++){
                if(getChildAt(i) is BouncingBall){
                    tintColor(getChildAt(i) as Sprite, 0xFF0000, 0.5);
                }
            }
        }

        if(timeNow.hours == timeWake.hours && timeNow.minutes == timeWake.minutes){

            // keep this all in the same date range to manage duration of alarm signal
            timeWake = timeNow;

            for( i=0;i<numChildren;i++){
                if(getChildAt(i) is BouncingBall){
                    tintColor(getChildAt(i) as Sprite, 0xFFFF00, 1);
                }
            }
        }
    }
}

```



else {



}