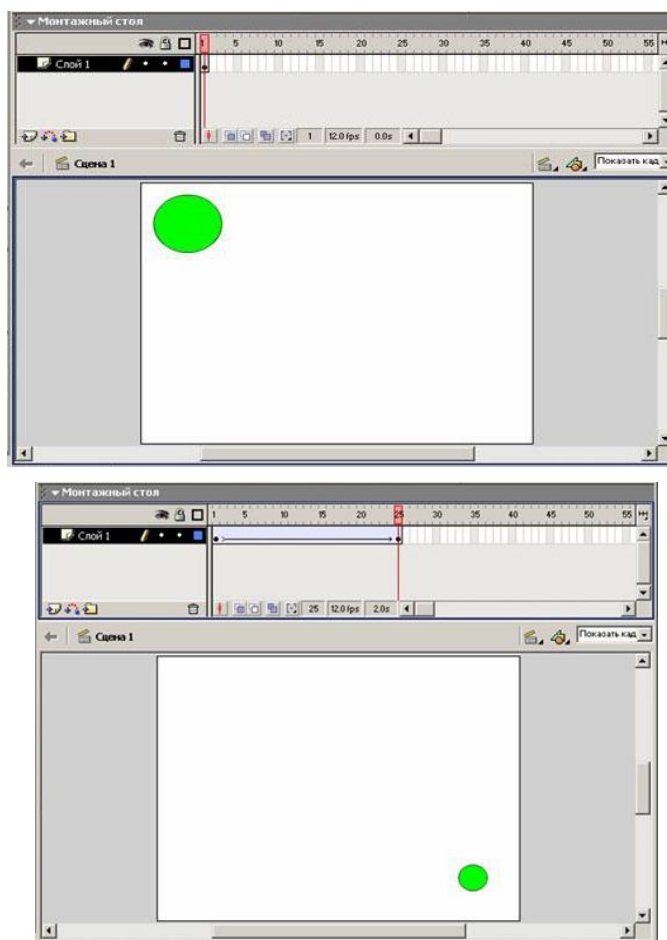


MURAKKAB ANIMATSIYALAR YARATISH

Flash dasturida animatsiya ikki xil buladi: kadrli (pokadrovoye sozdanie) va avtomatik(avtomaticheskoye sozdanie promejutochnyx kadrov). Avtomatik animatsiya shakllar geometriyasini uzgarishi (sha'e tweening) yoki boshkaruv kadrlar uzgarishi (motion tweening) asosidagi animatsiya turlarga bulinadi.

Boshkaruv kadrlar uzgarishi (motion tweening) asosidagi yaratilgan animatsiya.

SHu turdagi animatsiyani yaratish uchun biz bitta boshkaruv kadrni yaratamiz va unga belgi kushamiz. Masalan boshkaruv kadrda aylana chiziladi va u **grafik tasvir** belgi turiga F8 yoki Vstavka menyusida Preobrazovatg' v simvol (Convert to Symbol) buyrigi yordamida utkaziladi. Yoki Ctrl+F8 yoki Vstavka menyusida Novqy simvol (New symbol) buyrigini tanlab yangi belgi yaratamiz va Belgilar kutubxonasi yordamida uni boshkaruv kadrda kushamiz.



Endi belgi joylashgan boshkaruv kadrni sichkonchani ung tomondagi tugma yordamida tanlab Creat motion tweening yoki Vstavitg' menyusining shu nomli buyrugini tanlamiz. SHu xarakterlar natijasida boshkaruv kadr rangi kuk rangga uzgaradi. Endi sichkoncha bilan yangi kadrni tanlaymiz, (masalan 25-chi kadrni) va F6 yoki Vstavka menyusida Klyuchevoy kadr (Insert keyframe) aktiv katlamda keyingi boshkaruv kadrini yaratish buyrugini tanlaymiz. Natijada 25-chi kadrda kuk rangli boshkaruv kadr xosil kilinadi va shu kadr gacha birinchi boshkaruv kadr dan strelka xosil kilinadi. Birinchi boshkarish kadr dan ikkinchi boshkarish kadr gacha kadrlar kuk rangda avtomatik xosil kilinadi. Oxirgi xarakterimiz - bu ikkinchi boshkarish kadr dagi belgini uzgartirish (chuzish, aylantirish, kattalashtirish, kichkinalashtirish yoki kadr dagi joylanishini uzgartirish). Endi klaviaturadagi Enter tugmasini bosamiz va biz yaratgan animatsiyani kurishimiz mumkin.





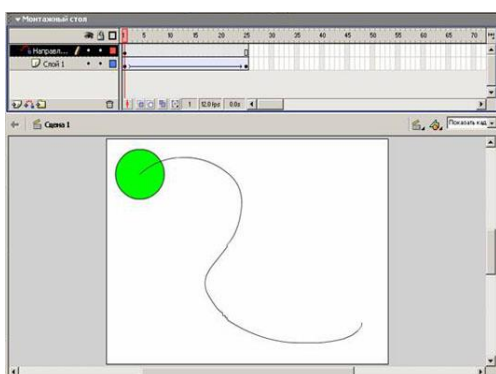
SHakllar geometriyasini uzgarishi (sha'e tweening) asosidagi yaratilgan animatsiya.


SHu turdagi animatsiyani yaratish uchun biz boshkaruv kadrlar uzgarishi (motion tweening) asosidagi yaratilgan animatsiya xosil kilamiz. Fakat endi oxirida ikkinchi katlamdagi belgini butunlay uchirib uning urniga kvadrat chizamiz. SHu xarakatimizdan keyin kadrlar rangi normal rangga kaytadi. Keyin birinchi va ikkinchi boshkaruv kadrlardagi **grafik tasvir** belgini Ctrl+B yoki Izmenitg' menyusidagi Razdelitg' otdelg'no (Breack a''artack) buyrug'i yordamida aloxida shakllarga bulib chikamiz.

Endi avval birinchi boshkaruv sichkoncha chap tugmasi bilan tanlab Svoystva ('ro'erties) yoki Ctrl+F3 yoki Okno menyusining shu nomli buyrug'ini tanlamiz. Natijada mulokot oynasi xosil kilinadi va unda Tweening soxasida Motions urniga Sha'e xolatini tanlaymiz. SHu natijasida boshkaruv kadr rangi yashil rangga uzgaradi. Endi ikinchi boshkaru kadrni xam sichkoncha bilan tanlab animatsiya turini Motions dan Sha'e ga uzgartiramiz va oxirida klaviaturadagi Enter tugmasini bosamiz va biz yaratgan animatsiyani kurishimiz mumkin.

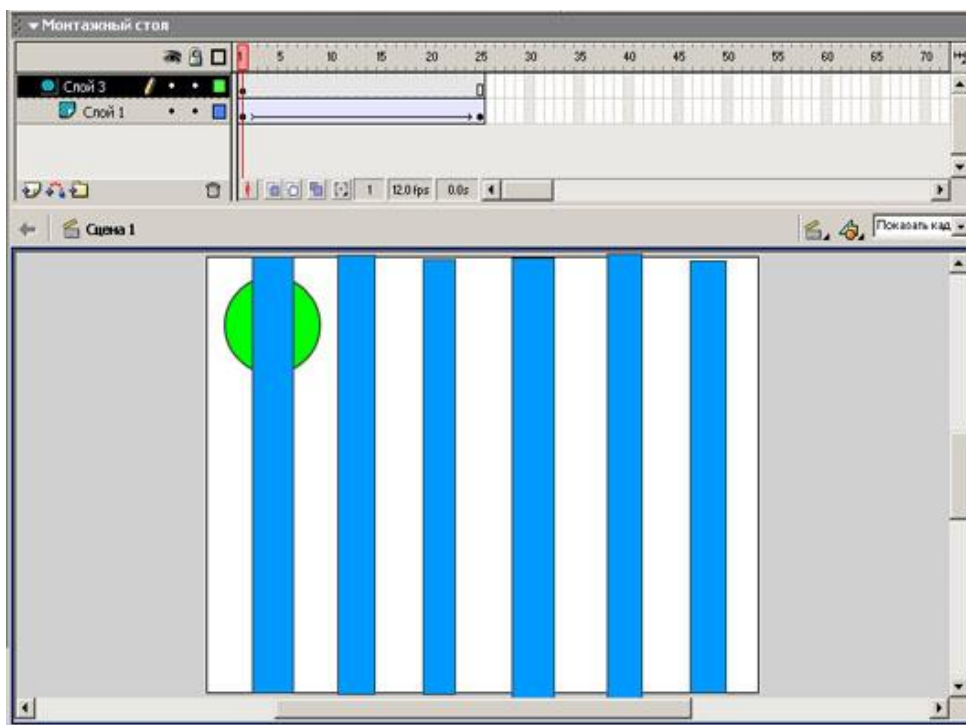


Kurishimiz mumkin ikkala animatsiyalarda xam ikkita boshkarish kadrlar urtasidagi masofa kadrlarni komp' yuter uzi avtomatik yaratgan va animatsiya tugri chizik buyicha xarakatlanyapti. Ammo agar bizga xarakat traektoriya buyicha bajarilishi kerak bulsa, u xolda nima kilish kerak? Bunday animatsiyalarni xosil kilish uchun bizning katlamimiz ustida maxsus  **xarakat traektoriya katlamini** yaratish kerak buladi. Va shu katlamda  kalam bilan kiyshik traektoriya chizig'ini chizamiz. Natijani kurish uchun klaviaturadagi Enter tugmasini bosamiz.



Hu bilan birga avtomatik animatsiyalarda foydalanish mumkin bulgan yana bir effekt mavjud - bu maska katlamini. Maska katlamini uchun asosiy katlam ustida yangi bush katlam yaratamiz. SHu katlamni sichkonchani chap tugmasi bilan bosib **Maska - Mask** buyrug'ini tanlaymiz. Natijada katlam kuk rangga uzgaradi va ikkala katamlar  uzgarishlardan ximoyalaniadi. Maska

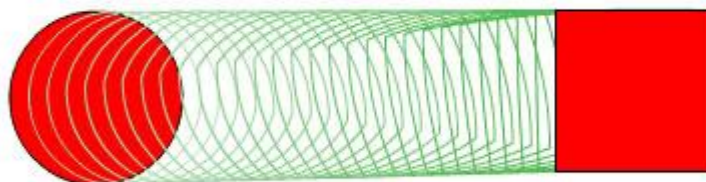
katlamdan shu ximoyani uchirib, boshkaruv kadrda bir nechta turtburchaklar chizamiz. Keyin yana maska katlamning ximoyasini yokib klaviaturadagi Enter tugmasini bosamiz va natijani kʻramiz.



Maska katlamdagi boshkaruv kadrni motion tweening animatsiyalashtirilsa xarakatlanish effekti yanada chiroyli buladi.

Macromedia Flash MX da Shape Tweening usuli

Ushbu metod bir ob'ekt formasini boshqa ob'ekt formasiga qayta o'zgartirish uchun mo'ljallangan

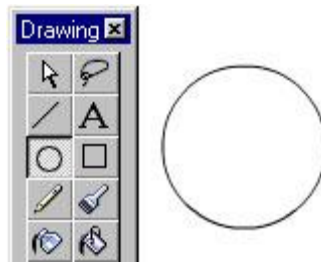


Ushbu metod faqatgina “рисунок” ob'ekti bilan ishlaydi. Ob'ektlar “text” va “belgi” ko'rinishida bo'lsa ham Modify>Break Apart (CTRL+B) yordamida o'zgartirish mumkin bo'ladi.

Keyinchalik biz Shape Tweening metodining atrof kvadratga qanchalik oddiy o'zgartirish kiritishini ko'rib chiqamiz.

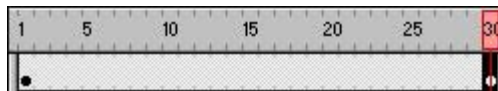
Qadam 1.

Birinchi navbatda Oval (O) uskunalar yordamida aylana chizib olamiz. Aynan aylanani hosil qilish uchun, ellips bo'lmasligi uchun SHIFT tugmasi bosiladi.



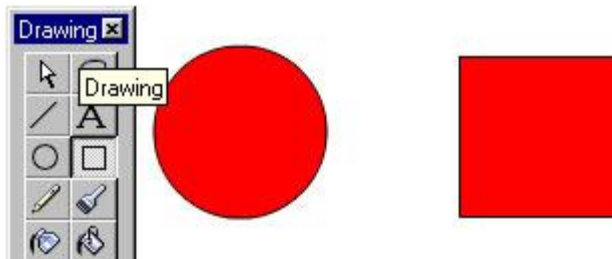
Qadam 2.

Arrow (A) uskunasi ishga tushiring va lineykada Timeline pozitsiyasidan 30-raqamli pozitsiyani belgilang. Endi esa menyudan Insert>Keyframe (F6) tanlaymiz. Ushbu harakatda siz 30-kadrlri bo'lajak rolikni ko'rasiz. Diqqat qiling, kadrlar o'rtasidagi lineyka kul rang holatga kelishi kerak.



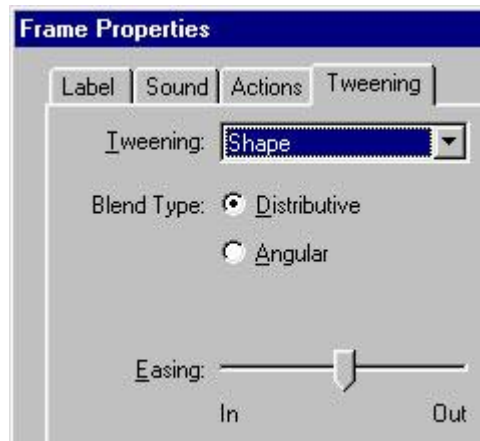
Qadam 3.

Rectangle (R) uskunalarining 30-kadrdra o'ng tomonda kvadrat atrofini chizing. Arrow (A) uskunalarini ishga tushiring, atroflicha o'rganib, DELETE o'chiring.



Qadam 4.

1-chi va 30-chi kadrlar orasidagi lineykaning kul rang qismiga ikki marotaba sichqonchani bosing va Tweening bo'limini oynadan belgilang. Shape opsiyasini o'rnatang.



Qadam 5.

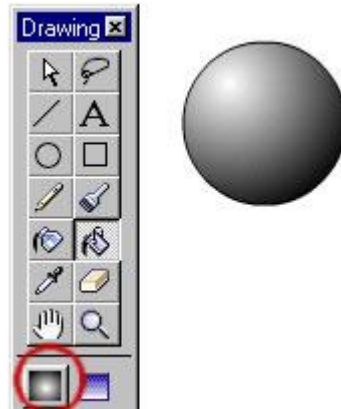
Kursorni 1-qatorga joylashtiring va ENTER tugmasini bosganingizda hammasi joyida ekanligiga iqror bo'ling. Rolikni oxirigacha qabul qilish uchun uni Control>Test Movie (CTRL+ENTER) ga o'tkazish kerak bo'ladi.

Macromedia Flash MX da Motion Twee usuli

Metod ob'ekt atributlarini boshqarishga mo'ljallangan. Unda koordinatalarni o'zgartirishdava harakatida qo'llaniladi.

Qadam 1.

Yangi xujjat yarating atroflicha chizib oling. Maydonga Paint Bucket (U) uskunasi yordamida oq-qora gradient bilan chizing.



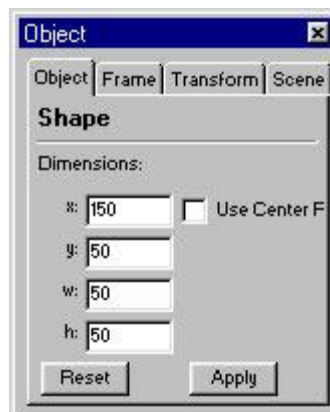
Qadam 2.

Insert>Select All (CTRL+A) ob'ektini belgilab oling va menyudan Insert>Convert to Symbol... (F8) ni belgilab oling. Maydonga name belgilab nomini kiriting: ball larda.



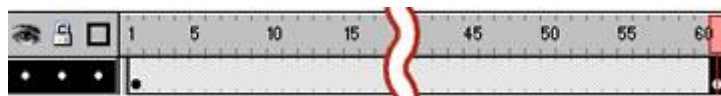
Qadam 3.

Belgilab olinganini kesmasdan, Window>Inspectors>Object palitradan x=150, y=50, w=50, h=50 parametrini kiriting.



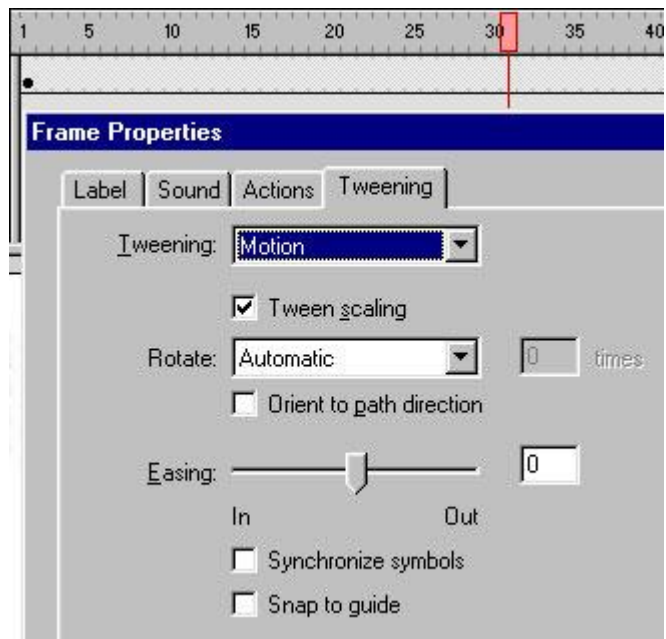
Qadam 4.

61-kadr ortidan tekshirib chiqing.



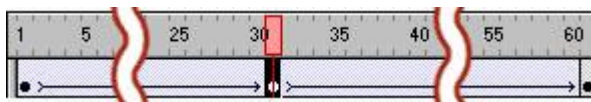
Qadam 5.

Chizg'ichning kul rangiga sichqonchani ikki marotaba birinchi va ikkinchi kadrlar orasiga bosing va oyna ochilgach Tweening ni tanlang. Motion opsiyasini o'rning.



Qadam 6.

31-kadr ortidan tekshirib boring (F6).



Qadam 7.

Ushbu kadrda ob'ektni sichqoncha bilan belgilab, Object palitrasidan $y=260$ koordinatasini o'rnatib. Kursorni birinchi kadrda kiritgandan so'ng ENTER tugmasini bosib uni tekshirib ko'ring. Shar harakatni yuqoridan pastga va ortga harakni bajaradi.